

# **Arriving at A Beijing-Warsaw-Abu Dhabi Consensus**

Leadership In Global Finance and Governance, Parts I, II, and III

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## Introduction

This document is in three parts. It focuses on economic and financial issues with respect to China, but considers two additional issues of critical and timely importance. They are interrelated, but designed to be useful separately. The same can be said for the five Appendixes.

*Part I* considers questions of governance in our times in general terms. The main concern is in how governance and finance in our times became matters of general concern.

*Part II* relates most specifically to China and its current state from the perspective of finance and economics. The questions considered in these section relate to China's current challenges and likely policies and programs for improvement from the perspectives of dual control and fluidity.

*Part III* is a recitation of prospective aspects of a consensus program for governance and finance based on histories and programs as led out by China, Poland, and the United Arab Emirates (UAE). The geopolitical profiles of these three countries are important to be sure, but in this sense, traditions and longstanding programs instigated by these three civilizations are presented as groundings for this proposed consensus.

The *Appendixes* outline support materials referenced in the three Parts of the report. These include historical reviews of the key cultures in question and specific models by Dr. Tingey for support and explanatory purposes.

## Finance 4.0

We have participated in the preparation of a book, *Finance 4.0*, which outlines many of the historical material and makes many of the prescriptive suggestions as contained in this document. Some of that information is included here. For a full treatment of the *Finance 4.0* phenomenon, we refer you to that book. If it is unavailable to you, please contact us.

## Part I – Governance lessons from history

There are two phrases that accountants say with great enthusiasm and regularity. The first of these, “accounting is the language of business,” leads out in virtually every published accounting text.

If it were true, we would be in considerable less trouble than we are now. It is not. Our troubles are greater than they would be because we all act as if the statement is true. “*Classification* is the language of business” is more to the point. Of course, accounting is a classification scheme, one of many. Classification, indeed, the functional integration of all things, must incorporate all things in both static and active, process-oriented ways. If accountants are to save us all, it must be based on this larger definition of the task.

The second common accounting phrase is “begin with the end in mind”. A chilling presumption in one light, the statement indicates that financial statements or other financial reports should be prepared with specific desirable outcomes in mind. This sounds good enough to be in the common vernacular of accountants, but it is problematic, as it could be used as justification to ignore critical facts and bend rules beyond their intended limits, corrupting important underlying processes.

On the other hand, the phrase also has to do with the good outcome of designing documents that are relevant and meaningful, given the context in which they are to be used. In our case, the “end in mind” is the private lives of the people as they wish to live them. The subject at hand is finance and governance and how they contribute to private life around the world, as the people wish to live their lives. Of course, there are limits as to available resources, natural and scientific realities, conflicting and incompatible desires, and irrationality and ignorance. For this, we need governance.

In the West, legitimacy is the principal objective of organizations and their interactions with the people and on their behalf. Legitimacy comes from two sources.<sup>1</sup> First is a state of social and political prominence. The organization in question is to be found where you would expect to find it in society.<sup>2</sup> When associated issues come up, all would associate the organization with those issues, whether the organization was public or private in nature. They are in the appropriate directories; their name is on the door. They got voted in. In this day and age, this condition is not met without being on electronic networks, the Internet, where you would expect them to be. When the issue comes up, there the organization is.

Second is that the organization does what people expect it to do. People invest their time and resources into their nation in two ways: (1) the country's appointed leaders will exercise authority in ways that are beneficial to the organization and its stakeholders. Authority and resources, most particularly financial

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1 Aldrich, H. E., and Ruef, M. 1999/2006. *Organizations evolving* (2<sup>nd</sup> ed.). London: SAGE Publications 179-207.

2 Castells, M. 1996-1998. *The information age: Economy, society, and culture, Volume I-III*. Malden, MA: Blackwell Publishers.

resources, will not be misused, but used well; (2) the organization will make sure that intelligent use of resources will take place. The proposition is that the organization will have access to greater knowledge than the individuals depending on it and that they trust that the organization will apply that knowledge appropriately. There is trust in this. In the case of a nation and its legitimacy the power of the state will make better use of knowledge than would be the case of individuals. This is to say the nation would be wise in wielding its power and would do so favoring knowledge over ignorance to be sure, but also over personal preference or prestige. Legitimacy in this sense would be earned by saying “no” to the people, but to do so based on knowledge that may not be universal, but that is valid.

We make use of this model. Surely, it is general enough to warrant support from the three major traditions represented by Beijing, Warsaw, and Abu Dhabi. The first type of legitimacy is called socio-political legitimacy. We also refer to it as immersion. The second type of legitimacy is called cognitive legitimacy. We refer to this as fluidity, more specifically, fluidity of knowledge. Cognitive legitimacy, or fluidity, is of two parts, top-down authoritative processes and horizontal, knowledge-based processes. The integrative combination of the two is dual control, a desirable condition that supports both aspects of legitimacy and supports the kind of breakthrough performance needed to support governance, given complexity and scale of modern requirements. We will refer to these more later and they are considered in Appendix D.<sup>3</sup>

History itself has been captive of nations and their affairs. We know relatively little about the private lives of the people. Following the stories of armies and of kings and power, we are left to pick through the hints as to what life must have been like in the past and how it was affected by nations and other organizations, by policy. Fortunately, study of the private lives of the people in the West has been carried out of late.<sup>4</sup> There are useful accounts of private life in China.<sup>5</sup> Clearly, in much of history, the life of the people was highly constrained by what powerful people, individually and collectively, wanted of them and were willing to let them have. The powerful people were people, too, a part of the lifestyle question, whose lives were bounded by many of the same possibilities and constraints felt by their social and political inferiors.

It is not to be assumed that private lives in our time are destined to be wildly individualistic. The point is to understand how lifestyle preference existed, exerting a tug-of-war, if you will, with organizational powers and national powers and preferences. This being said, there is a clear historical movement toward individualism, at least in terms of consumption choices and choice of where to live with a decided preference for city living. Although it is questionable as to what the effects of the Internet and

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3 Tingey, K. B. 2009. *Methods-based management*. San Diego, CA: University Readers.

4 Ariès, P., and Duby, G. (Eds.) 1987-1991. *A history of private life*, Volumes I-V. Cambridge, MA: The Belknap Press of Harvard University Press. Originally published in French by Éditions du Seuil.

5 Balazs, E. (Wright, H. M. (Trans.). 1964. *Chinese civilization and bureaucracy*. New Haven, CT: Yale University Press; Schram, S. R. (Ed.). 1987. *Foundations and limits of state power in China*. London/Hong Kong: School of Oriental and African Studies University of London, The Chinese University of Hong Kong.

its various enticements are, they are taking the people of the world to a place, conceptually, where it has never been. It is difficult to imagine a return to the preferences of the distant past. Ironically, although the geography of a person's life used to be all-important, the expanding enticements of the Internet have the effect of removing location as an overriding factor. As long as access to the network is available, location becomes less of an issue. This may serve as an important component in governance and finance at all levels.

The principal issue at hand lies in finance and governance in China, also in Poland and the Muslim world. Specific policy recommendations are reserved for this case for China. What should be done to firm up policy, institutions, and infrastructure in finance and governance, which touch all states and necessitates collaboration and coordination among regimes from all political, social, ethnic, and philosophical traditions? What should global finance look like in the foreseeable future? What kinds of expectations should we have in terms of the ideal as it faces the realities of economic and political life?

We need to use history as our guide. It is possible that in the modern era, philosophy has proven counter-productive. When it comes to establishing “networks of trust”<sup>6</sup> and coming to an understanding of viable common paths, words can get in the way. There should be some principles upon which all can agree, to be sure. We believe that there are. Before we investigate them, let us consider how we can evaluate such principles. Do they make sense as to individuals? Do they make sense for the public?

We need to consider such questions from a Western perspective to be sure; Western philosophy underscores the thoughts and actions of most existing institutions. We must also look to a desirable future from Eastern perspectives. Key among these, of course, is the Chinese experience. Also important is an understanding of the religious traditions of Islam and Buddhism, as they convey supranational connotations, and many other belief systems and cultures.

A combination of traditions is more than desirable, it is essential. We must come to understand and to depend on all available, proven philosophies, perspectives, and programs. This is underscored in the Polish tradition, where it has been learned that to leave issues unresolved among important parties is to court eventual unraveling of desired outcomes, to be considered later in the “3 Cs” section.

Understanding of the effects of policy on private lives under conditions of openness can enrich and advance our knowledge. Furthermore, a melding of thought is needed in order to gain genuine understanding and commitment. Pretending to understand and to agree is not sufficient for successful outcomes, particularly as difficulties set in and common objectives seem distant and unachievable.

We apologize in advance for our limited capacity in Chinese. Although we reference many sources from many traditions, this analysis will surely suffer from being English-centric. This being said, it makes use of scholarly sources of the highest quality.

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6 Tilly, C. 2007. *Democracy*. Cambridge, UK: Cambridge University Press, 23.



The Western tradition is attributed to the Greeks, of course, also much of Eastern governance.<sup>7</sup> Before them were various traditions going back to the Sumerians of Mesopotamia. Records there document governance relationships that are unfathomably old.<sup>8</sup> The Sumerians were also highly civilized, with ordered societies and highly documented domestic and regional affairs. With regard to India, from 2300 to 1800 BCE “the people of the Indus Valley civilization lived in their well-planned cities, raised their wheat, barley, and cotton, and carried on trade with the Persian Gulf, Afghanistan, and the rest of the subcontinent”.<sup>9</sup>

In China, forceful, top down governance in the creation of a very strong state is documented at 2700 BCE under the “Yellow Emperor” Huangdi.<sup>10</sup> This was preceded by the Warring States period which, although ungoverned, served as an innovative philosophical environment for Confucius, Mencius, and scores of followers who longed for a better time, even to the point of “haunt[ing] capital cities, pleading for a chance to set things right.”<sup>11</sup> At that time “many people idealized a golden age of earlier times when according to legend all China had lived peacefully under one ruler.”<sup>12</sup> This is reminiscent of Sumerian records, which curiously indicate that their government began “‘full grown...full blown,’ on the world scene, since they were planned and brought about by the all-powerful gods.”<sup>13</sup> It is interesting that, although evolutionists have laid out a path for humanity from individual to group, presenting an uninterrupted picture from individual survival to crude civility, the Sumerian record documents social order from very early times. As to a Sumer-China connection, there doesn't seem to be documentation of this from Sumer records,<sup>14</sup> nor those of China.<sup>15</sup>

Thus, expecting to find a pattern from simplicity and crude conditions from old to new, historians have rather found very high levels of civilization back through the millenia, where writing and documentation have long traditions and where complex societal patterns demonstrate sophistication in terms of public affairs, trade, and finance. As it turns out, chaos and disorder is not our heritage at all, but mankind has enjoyed long periods of order and stability. This is not to say that there has not been turmoil, that there have not been social and geophysical setback and disasters. How we got to where we are demonstrates much cooperation, and collaboration, and progress. As a result, there are many traditions embedded within world cultures that are to be understood and encouraged.

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7 General Affairs Office of the CPPCC National Committee. 2004. *The Chinese People's Political Consultative Conference*. Beijing: Foreign Languages Press, 6.

8 Woolley, C. L. 1995. *The Sumerians*. New York: Barnes & Noble Books/Oxford University Press, 21-26.

9 Wright, E. (Ed.) 1985. *History of the world: Prehistory to renaissance*, Vol I. London: Bonanza Books, 293.

10 Kramer, S. N. 1963. *The Sumerians: Their history, culture, and character*. Chicago: The University of Chicago Press, 303.

11 Blakney, R. B. 1955. *The way of life: Lao Tzu*. New York: A Mentor Book, 17.

12 Fairbank, J. K. 1992. *China: A new history*. Cambridge, MA: The Belknap Press of Harvard University Press, 51.

13 Woolley, 33-34.

14 Kramer, 284.

15 von Falkenhausen, L. 1982.1991. Archaeology: Legendary prehistory. In B. Hook, *The Cambridge Encyclopedia of China*, Cambridge, UK: Cambridge University Press, 136.

Advancement surely can come from applying these traditions, or at least organizing affairs so that those who understand them best can apply them.

This is a “bottoms-up” approach to governance, an iterative approach that factors in the legitimacy of the governance model from the perspective of the governed. This is to say that good governance is to be judged by the ability of the people being governed to live their lives as they wish. Looking at this from a historical perspective is something of a challenge; the concept of quality regarding private lives through history is controversial. For one thing, the challenge of survival in elemental times may not have been pleasant, hovering just above annihilation or starvation, but we do not really know. According to early Sumerian texts, the rank-and-file were “created by the gods solely for their benefit and leisure.”<sup>16</sup> This hardly resonates as much of a lifestyle, but the system did stand the test of time beyond modern understanding.

Historically, we can see an interesting evolution of interests, beginning with personal questions of survival to clan and organizational structures that surfaced to meet the particular needs of the people. In the process, questions of power and control emerged, resulting in governance patterns in which the desires and prerogatives of more powerful individuals and groups were able to impose their desires onto the rest. This shared decisionmaking process started with individuals, to be sure, but grew to incorporate actions by groups of cascading size and scope, considering issues of authority and knowledge.

We will use the organizational traditions of the West and the East as baseline for our purposes featuring China and Islam, along with specific review of the traditions of Poland, which in many ways straddles the others. Often underestimated and misunderstood, Poland represents an incredible diversity of experiences, cultural elements, and traditions of development and cooperation.<sup>17</sup> Situated at one of the critical crossroads of mankind, Poland has witnessed much of history. Long before modern geopolitics stationed Poland dangerously, the Polish people, an amalgamation themselves from East, West, North, and South, had to deal with invaders from all directions. Highly structured themselves, the Poles learned to cooperate, to forgive, and to yield when needed in order to live another day and to ultimately prevail. Undeterred by opinions of others, the Poles are a rebuilding people.

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<sup>16</sup> Kramer, 123.

<sup>17</sup> Zamoycki, A. 2009. *Poland: A history*. New York: Hippocrene Books.

## Governance and process

Non-political and beyond the scope of any particular economic policy, finance is the ultimate harbinger of the success of nations. Money, of course, is the principal medium of exchange for products and services in modern societies. The value of money has much to do with the quality of governance. Trade between such regions incorporates explicit judgments as to the fitness of countries or regions in question, particularly by means of monetary exchange rates.

People look to their governments for protection, but this has expanded of late into an understanding of international developments and programs. As outlined in universally-accepted international declarations, such as the *United Nations Year 2000 Millennium Declaration* and followup activities, such protections take on many dimensions. Governance enjoys centrality of...

...all processes of governing, whether undertaken by a government, market or network, whether over a family, tribe, formal or informal organization or territory and whether through laws, norms, power or language.<sup>18</sup>

Governance relates to...

...the processes of interaction and decisionmaking among the actors involved in a collective problem that lead to the creation, reinforcement, or reproduction of social norms and institutions.<sup>19</sup>

The connection between governance and finance is so critical that shortfalls as identified need to be corrected as soon as possible. For one thing, public governance is a critical factor in meeting key social and political requirements for all countries. In addition to this, the governance environment provided by governments define the requirements and capabilities of all organizations in their areas of responsibility and influence, further contributing to or detracting from the well-being of the people.

...corporate governance arises from incentives created by rules and regulations that emerge from a public policy process, reflecting the power of alternative political coalitions... This assertion is global; we believe it applies to all the countries ... even in the soft authoritarian and “hard” democracies.<sup>20</sup>

This raises a critical question. If governance models reflect political preferences and powers and there is inadequate attention to governance generally, both political and private, does this reflect a political preference for chaos? This brings to mind a sardonic publication by Scott Adams “When did ignorance

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18 Bevir, M. 2013. *Governance: A very short introduction*. Oxford, UK: Oxford University Press.

19 Hufty, Marc (2011). Investigating policy processes: The governance analytical framework (GAF). In U. Wiesmann, H. Hurni, et al. (Eds.). *Research for sustainable development: Foundations, experiences, and perspectives*. Bern: Geographica Bernensia, 403–424.

20 Gourevitch, P. A. and Shinn, J. 2005. *Political power and corporate control: The new global politics of corporate governance*. Princeton, NJ: Princeton University Press, 276.

become a point of view?”<sup>21</sup> In the United States, there is a long anti-government tradition based on the assertion that since government is destined to function poorly, it should be minimized as a matter of strategy.

As we review history with respect to governance, we need to keep these factors in mind. Governance gets confused with the traditional term government. The two can be distinguished as follows:

In empirical terms, governance refers to a shift in public organization since the 1980s. The world of government has changed. Increasingly governments rely on private and voluntary sector actors to manage and deliver services. The state enters contracts with other organizations, for example, to manage prisons and to provide training to the unemployed. The state forms partnerships with other organizations, for example, to build roads and rail lines and to deliver humanitarian aid. Whereas government had consisted in no small measure of bureaucratic hierarchies, the new governance gives greater scope to markets and networks.<sup>22</sup>

Governance on a global level has emerged from events of the last several decades.<sup>23</sup> Not only do governments need thus to interact more deeply with one another, functionally-oriented networks are necessary in order to arrive at desired outcomes across-the-board.

The state is no longer the sole arbiter of what occurs within its borders. Whether states like it or not, they increasingly have to address supra-territorial issues, actors, and interests. In addition, globalization occurred. ...as states tried to exercise control over a rapidly changing world, they created new multilateral regulatory arrangements. The overall result of globalization is thus a more multilayered and privatized system of governance. Multiayered governance involves regulation by sub-state, state, and supra-state bodies with trans-border connections at each layer.<sup>24</sup>

Thus, functionality at the many levels lends credence to the need for a new, activist approach to governance, considering the need for “thrust-and-parry” as pushback is required of nations at the periphery in particular.

The fact that money or financial capital as opposed to productive capital has become the dominant form of capital in the age of global capitalism is one of the main reasons behind the fragility of the emerging markets... Huge profits are made from the circulation of money capital but here capital accumulation is “disconnected from the social relationship in which money and wealth were previously embedded.”<sup>25</sup>

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21 Adams, S. 2001. *When did ignorance become a point of view?* A Dilbert book. Kansas City, MO: Andrews McMeel Publishing.

22 Bevir, 3.

23 Kahler, M. 1990. The international political economy. *Foreign Affairs*, 69(4), 139-151; Kahler, M. 2013. Rising powers and global governance: Negotiating change in a resilient status quo. *International Affairs*, 89(3), 711-729.

24 Bevir, 95.

25 Aydin, 15; quotation of Hoogvelt, A. 2001. *Globalization and the postcolonial world*, 2<sup>nd</sup> ed. Basingstoke, UK: Palgrave,

Finance then is a critical factor in establishing stability. Open doors facilitate two-way traffic and in an environment of freely-moving capital, nations can get caught up in the whip-saw of capital swings that have nothing to do with the local economy other than that it introduces high levels of volatility to local capital markets, at least in the short-term.

The state plays a crucial role in the way resources are mobilized and used in production and distribution. Without the state's managerial and coordinating functions there would be chaos, as many economic agents would want to steer development towards their own interests. The state, as the only capable agent on a national level, acts as a “coordinating intelligence” and guides the direction of development.<sup>26</sup>

This must be kept in mind as a critical aspect of development programs. Designed to provide stability, traditional approaches opened the door to global capital movements while weakening states and dampening their ability to support the needs of their people.

## **The global crisis of control**

Mindless retreat on the matter of governance leaves the door open to mayhem. The stakes have never been higher, as the world clearly suffers from governance crisis. Witness the lack of resolution of fundamental issues in finance and economics. The best that can be said is that there are fairly effective ways of curing institutional and system failure through fiscal after-the-fact stimulus, but a lack of prescriptive measures to be taken otherwise. As indicated by Peter Gourevitch, there is a direct relationship between public and private governance options.

There is an ongoing flow of examples of governance crises, public and private failing going hand-in-hand. In China, there is a recent example of fictional economic statistics “as a result of repetitive accounting, a lack of unified sources and incomplete basic information.”

In the end of 2014, Fuxin and Huludao, two cities in Liaoning Province, faked the number of newly commissioned housing projects. The non-existent projects accounted for 52.8 percent and 29.3 percent of the two cities' total projects, respectively.<sup>27</sup>

In the United States, negotiations between Boeing Corporation and federal aviation regulators recently resulted in the payment by the company of millions of dollars in fines in acknowledgment of sloppy operations, of poor governance. General relief was expressed by regulators that Boeing “owned up” to their many failings, but there was no specific documentation as to how the problem was to be solve, only that they would resolve it. There was no mention of governmental support, assistance,

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140-141.

26 Ibid., 78.

27 Liu, T. 2015, December 15. “Bursting bubbles: Inflated statistics wreak havoc on economies of Northeast China,” *Global Times*, BizInsight, B8.

collaboration, participation, or even involvement was to take place.<sup>28</sup> In Germany we have Volkswagen's famous fraudulent systems that were purposive, material, long-standing, and unrepentant.<sup>29</sup>

How can such egregious, obvious governance lapses exist? Diane Vaughn, who documented systematic governance failures at the U.S. National Aeronautics and Space Administration (NASA) and elsewhere, makes reference to a phenomena she calls “the normalization of deviance.”<sup>30</sup> This is to say that in an environment characterized by inadequate governance mechanisms, we would say lacking dual control, organizational participants establish patterns of behavior that they know to be wrong, with adverse consequences that they fail to take accountability or either individually or as a whole.<sup>31</sup>

As can be seen in *Figure 1*, “What was Volkswagen thinking?” such a negative governance culture results in a clouding of the mind that supports deviant behavior among people that would not be deviant or subversive of their own accord. Of course, such an environment tilts the nature of organizations toward others who are deviant in thought and action, further aggravating the problem of poor governance.

Of course, technological, systemic factors contribute to governance issues – further tilting activity to deviant or organized, process-driven outcomes. This is a widespread problem that can largely be placed at the feet of finance and the lack of action

historically to resolve fundamental problems with regard to accountability, organization and management of data, and commitment to process as the key integrative mechanism of all things.

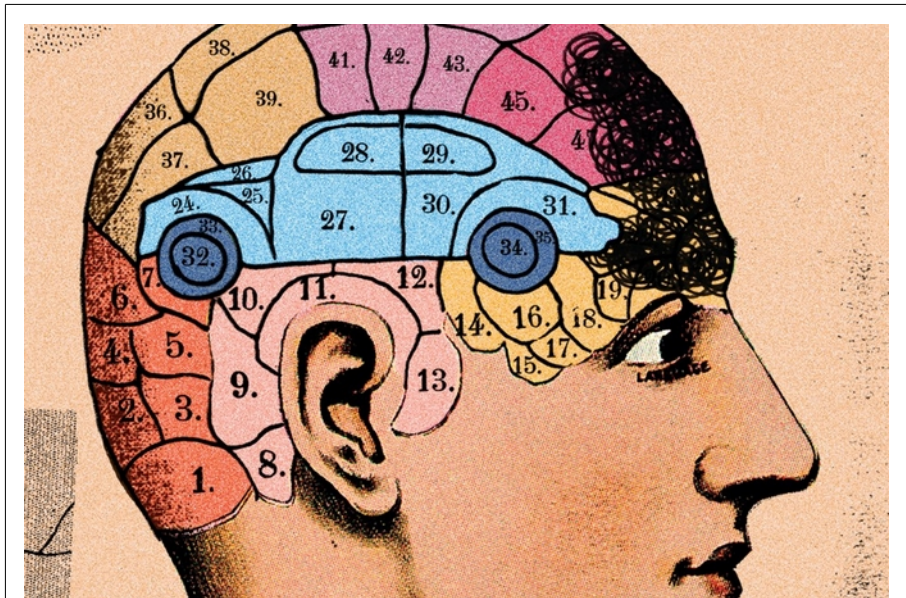


Figure 1: “What was Volkswagen thinking” image by Justin Renteria, *The Atlantic* January/February 2016, 26.x

28 Pasztor, A., and Wall, R. 2015, December 23. “Boeing accepts quality-control penalties.” *The Wall Street Journal*, Business News, B3.

29 Useem, J. 2016, January/February. “What was Volkswagen thinking? On the origins of corporate evil – and idiocy. *The Atlantic*, 26.

30 Vaughan, D. 1997. The trickle-down effect: Policy decisions, risky work, and the Challenger tragedy. *California Management Review*, 39(2), 84-85.

31 Vaughn, D. 1999. The dark side of organizations: Mistake, misconduct, and disaster. *Annual Review of Sociology*, 25, 271-305.

## In case you weren't listening: The Madoff example

Michael Lewis and David Einhorn provide valuable information on what causes instability in the traditional Western finance model.<sup>32</sup> It is a cautionary tale, not one that speaks of stability. They start out with a story that can serve as a key to understanding dual control and fluidity as they can enrich governance and the finance model.

The story is about a commonly-known situation, the financial fraud carried out by Bernard Madoff. The fact that there was a fraud is not the issue. The fact that the fraud was possible on the level that it occurred is an important part of the issue. Lewis and Einhorn introduce a financial analyst, Harry Markopolos, who identified in 1999 that the Madoff program was fraudulent.<sup>33</sup> His employers had requested that he design a competitive program. He was able to access performance numbers for the Madoff organization, which he studied and concluded that the program was not possible as presented to the public, that it was most assuredly a fraudulent Ponzi scheme, meaning that new investor money was being used to pay off old investors, who received fraudulent reports as to what was happening to invested money.

He set out to inform the Securities and Exchange Commission (SEC) of the problem. Year-after-year, he got no response. As indicated by Lewis and Einhorn,

[Markopolos] sent his report to the SEC on Nov. 7, 2005, more than three years before Mr. Madoff was finally exposed, but he had been trying to explain the fraud to them since 1999...

...and yet the SEC's cursory investigation of Mr. Madoff pronounced him free of fraud...

What's interesting about the Madoff scandal, in retrospect, is how little interest anyone inside the financial system had in exposing it.<sup>34</sup>

Eventually, the curtain came down on Madoff. He is now in federal prison. He had directly defrauded people of about \$65 billion. With interest and profits, his full “forfeit” amount was \$170 billion.<sup>35</sup> In the years of trying to get the attention of regulators, Markopolos found that they were not capable of understanding the underlying issues. The math told a clear story, to which he added twenty-nine red flags that made it that much more obvious. Basically, as he reports, “it wasn't all that hard to see that

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32 Lewis, M., and Einhorn, D. 2009, January 3. The end of the financial world as we know it. *New York Times, The Opinion Pages*. Available online: [http://www.nytimes.com/2009/01/04/opinion/04lewiseinhorn.html?\\_r=0](http://www.nytimes.com/2009/01/04/opinion/04lewiseinhorn.html?_r=0).

33 Markopolos, H. M. 2005, November 7. *The world's largest hedge fund is a fraud*. Boston, MA: Rampart Investment Management.

34 Lewis and Einhorn, 2.

35 Bloomberg News. 2009, June 27. Madoff to forfeit \$170 billion in assets ahead of sentencing. *Washington Post*. Available online: <http://www.washingtonpost.com/wp-dyn/content/article/2009/06/26/AR2009062604652.html>.

the profits were too good to be true.”<sup>36</sup> One problem was that many people were making money from fees, a condition that muted their judgment.

The situation should have been caught very early on by the pattern of data. This is a dual control issue, as the system needs to incorporate expert-designed models for evaluating what is going on. This was not the first Ponzi scheme to plague mankind. As Markopolos indicated in the report, the fraudulent nature of the Madoff program was widely-known. Understanding the problem at its core, however, was more involved. Originally, he said that the analysis required four hours of effort. He indicated, “Very few people in the world have the mathematical background needed to manage these types of products but I am one of them.”<sup>37</sup>

Let's say Madoff did something unique that could not have been detected. Once it was detected, it should be integrated within the system by someone like Markopolos – validating that what was saying was genuine – so that it would be detected the next time. This demonstrates the benefit of evaluating processes as well as data patterns, as processes are tools to recognize, transform, and store data in various forms. An expert-, knowledge-driven network is needed to position expertise, such as what Markopolos brought to the table in the Madoff situation, within a network of generalists and specialists. Generalists are needed to provide perspective and to not only validate the work of specialists, but designate which specialists represent the more substantive solutions. For all that Markopolos obviously brought to the table, he said some things that raise red flags of warning. First of all, he declared his own genius, which many real experts do not need to do. Second, he indicated expertise in derivatives, options strategies, “split strike conversion products” and several kinds of index-related products that may or may not have anything to do with detecting accounting anomalies.<sup>38</sup> It could be that he is an expert, but not the right kind of expert.

For further validation, data needs to be independently and constantly gathered and evaluated independently to effectively validate the processes and the outcomes. *This collective set of activities, in areas of expertise as well as authority, is what fluidity is.*

Finally, the system needs to gather together the process for regulation and monitoring so that responsible people do not have the choice of acting or not acting based on their whims – or be limited to actions where they had specialized knowledge. The problem in the Madoff case wasn't really that the SEC agent responsible didn't understand the Madoff program's complexity, *it was that she needed to*, which is an entirely different thing. A regulatory system will never succeed so long as they require that the representatives on the periphery understand everything there is to be known in a field or sector.

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<sup>36</sup> Ibid.

<sup>37</sup> Markopolos, 1.

<sup>38</sup> Ibid.



When situations are identified, they need to be provided with expert-driven guidance on how to act in a timely manner, setting reasonable time-lines as to such actions to forestall procrastination.

## How control was lost

Ironically, in spite of all that is known and all available resources in our time, the era from the *Industrial Revolution* onward will surely be known to historians as a time of unrest, chaos, and uncertainty. Frighteningly, this period of enhanced capacity due to technology is uncontrolled socially, politically, and in our relationship with the environment. Much scientifically-validated knowledge lies unused. Not only is there much muddled thinking, poorly-conceived thoughts are put into action and expressed via electronic networks. This results in counterproductive actions by many people and damaging functionality by equipment, large and small.<sup>39</sup>

## Placing economics in priority over the social good

The world economy has taken on a life of its own, lacking capabilities and subtleties needed to meet the needs of the people or the requirements of their institutions. Of course, capitalism has had its critics since before the dawn of the *Industrial Revolution*.<sup>40</sup> As stated by St. Thomas Aquinas in the 13<sup>th</sup> century,

Artificial wealth comprises the things which of themselves satisfy no natural need, for example money, which is a human contrivance.<sup>41</sup>

Criticism now surfaces from unanticipated sources, including capitalists themselves.<sup>42</sup> Successful hedge fund managers are recusing themselves from participation due to chaos in the markets.<sup>43</sup> Policy leaders admit that their models are not effective, that they are even counterproductive.<sup>44</sup> Governance has failed to the point that the legitimacy of science has been virtually destroyed.<sup>45</sup> The problem is not a new one,<sup>46</sup> but there has been very little progress since glaring issues have been raised.<sup>47</sup>

39 Tingey, K. B. Unpublished. *Human prosperity model*.

40 Schumpeter, J. A. 1942/1950a. *Capitalism, socialism, and democracy*. New York: Harper Perennial.

41 Graeber, D. 2011/2012. *Debt: The first 5,000 years*. Brooklyn, NY: Melville House, 251.

42 Sachs, J. 2011/2012. *The price of civilization: Reawakening American virtue and prosperity*. New York: Random House.

43 Nevsky Fund plc. 2015, December. *Final newsletter*. London: Nevsky Capital LLP.

44 Stiglitz, J. E. 2004. *The post Washington Consensus consensus*. New York: Columbia University/The Initiative for Policy Dialogue; Kuczynski, P. P., and Williamson, J. (Eds.). 2003. *After the Washington Consensus: Restarting growth and reform in Latin America*. Washington, DC: Institute for International Economics. This is underscored by recent capital flight from emerging markets, which was very high, at an unexpected level of \$735 billion outflow for 2015, mostly from China: The Institute of International Finance. 2016, January 20. *Capital flows to emerging markets*. Washington, DC: Author.

45 Oreskes, N., and Conway, E. M. 2010. *Merchants of doubt: How a handful of scientists obscured the truth in issues from tobacco smoke to global warming*. New York: Bloomsbury Press.

46 Shlaes, A. 2007.2008. *The forgotten man: A new history of the Great Depression*. New York: Harper Perennial; Eccles, M. S. 1951. *Beckoning frontiers: Public and personal recollections*. New York: Alfred A. Knopf.

47 Kolko, J. 1988. *Restructuring the world economy*. New York: Pantheon Books; Greider, W., 1987. *Secrets of the temple: How the Federal Reserve runs the country*. New York: Simon and Schuster.

The existence of systemic limitations in the West was the last thing on the minds of leaders of socialist countries during the period of awakening in the 1980s and 1990s. As to China and Poland, world markets and generally-accepted models of governance and finance were embraced with enthusiasm, sharing the naivete of Western economic participants.<sup>48</sup> Time has shown that the “grass on the other side of the street” was not as “green” as it had appeared.<sup>49</sup> As to Islam, a competing, socially-centered model has been proffered since its founding in the 7<sup>th</sup> century CE, but documented criticisms were largely forestalled. For almost a hundred years, Islamic institutions have been weakened and many countries in the Middle East have been compromised politically and economically.<sup>50</sup> Not surprisingly, given Islam's long history, replete with stability and growth, Muslim scholars, economists, and politicians have much to say with regard to governance and economics.<sup>51</sup>

Money in our day has replaced the power of the sword in earlier, less civil times. It has become an instrument of power, a weapon. Intended as a means to an end, it has overtaken the economy and served to corrupt the ends themselves. Having broken ties that existed in the system that created it, money has taken flight, much of it now withheld from view of the economy generally. Of course, as indicated earlier, financial manipulation and speculation that had nothing whatsoever to do with work or value or services performed resulted in a run-up of what goes by the name of money but that serves as money's worst enemy. There is so much of it that if saw the light of day, it would set the economy awash in lower prices for everything, an unprecedented inflationary tsunami.

In this, we face a tragic paradox. As loose controls and poor governance have corrupted economic outcomes, the great store of money that has been created and is being hoarded runs the risk of being worthless, as society inches closer and closer to a state of nature in which nothing satisfactory is available. It is no wonder that we have environmental crises. It is no wonder outcomes are poor, particularly in complex areas such as health. For decades, there has been criticism of what has been termed “silo” thinking, where people concentrate on narrow issues and questions, ignoring effects of the whole. This is a natural outgrowth of the loss of control from which society suffers. In an environment of chaos, people compensate by minimizing their scope of concern. Individually and collectively, they lay out boundaries that are damaging and confining, but nonetheless allow them to distance themselves from the bigger problems, from outcomes.

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48 Paulson, H. M., Jr. 2015. *Dealing with China*. New York: Twelve/Hatchett Book Group, 403.

49 Drobyshevskiy, S. 2015. Do we need a global “central planner” and “optimal” economic policy for all? In Chongyang Institute for Financial Studies (Ed.), *G20 and global governance: Blue book of g20 think tank 2015-2016*. Beijing: Renmin University of China/China CITIC Press, 165-168; Kahler, M. 2014. Rising powers and global governance: Negotiating change in a resilient status quo. *International Affairs*, 89(3), 711-729; Zamoyski, A. 2012. *Poland: A history*. New York: Hippocrene Books, 406-408.

50 Hourani, A. 1991. Cambridge, MA: the Belknap Press of Harvard University Press.

51 Ustaoglu, M., and Incekara, A. (Eds.). 2014. *Islamic finance alternatives for emerging economies: Empirical evidence from Turkey*. New York: Palgrave Macmillan; Walberg, E. 2013. *From postmodernism to postsecularism: Re-emerging Islamic civilization*. Atlanta, GA: Clarity Press; Davutoğlu, A. 1994. *Alternative paradigms: The impact of Islamic and Western Weltanschauungs on political theory*. Lanham, MA: University Press of America.

Both Chinese and Islamic traditions represent very different lines of reasoning. Confucianism represents embedded environmental responsibility, as does Islam. More will be considered with regard to both throughout this document. Poles have always used their practical nature to survive and to thrive. All of these histories and traditions point to more collaborative, more integrative ways of organizing ourselves, particularly with regard to financial performance. Apart from override debates over political and social philosophies, there are numerous ways in which we might organize economic activity, including governance and rewards from labor and residual claims.<sup>52</sup>

There is acknowledgment of the need for more sociality in national programs. One example of this is the “GDP and Beyond” initiative of the European Union. This includes suggestions as to “complementing GDP with environmental and social indicators,” providing “near real-time information for decision-making,” making “more accurate reporting of distribution and inequalities between regions and social groups,” “improving measurement towards sustainability,” and “extending national accounts to environmental and social issues.”<sup>53</sup> Recognizing the need is indeed the first step in the development of solutions.

## Misunderstanding of market equilibrium theories

At the culmination of the postwar developmental era, it became clear that a generation of efforts had been squandered by forcing ineffective and unfounded policies on countries in need of help. At the same time, in 1989, economist John Williamson declared what he called the “Washington Consensus,” which was first widely praised, then resoundingly criticized, including by him.<sup>54</sup> The consensus he declared was based on a series of ten principles, many of which had merit, but which together resulted in unwarranted pain and suffering and missed opportunities. Closely related to this is the famous “shock therapy” post-Soviet reform program, also referred to as “market bolshevism”<sup>55</sup> that purposefully paid no attention to current conditions or Soviet-era reforms or developments. Based on the concept of “jumping” across a chasm,<sup>56</sup> such efforts call to mind Chairman Mao’s “great leap forward”, another development analogy with shaky groundings.<sup>57</sup>

Some say that a consensus is needed, just not this one. Others say that no consensus is possible, or even desirable. One thing is certain, governments need to be proactive. Another is that they cannot depend on any kind of “market magic” effects. Unpredictable effects of open, global capital markets are likely

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52 Ellerman, D. 1990. *The democratic firm*. Washington, DC: The World Bank/Rev. 1997. Beijing: Xinhua Publishing House.

53 European Commission. 2013. *Commission staff working document: Progress on “GDP and beyond” actions*. Brussels: Author, 5-7.

54 Williamson, J. 1990. What Washington means by policy reform. In J. Williamson (Ed.), *Latin American adjustment: How much has happened?* Washington, DC: Institute for International Economics, 5-38.

55 Ellerman, D. 2006. *Helping people help themselves: From the World Bank to an alternative philosophy of development assistance*. Ann Arbor, MI: Michigan University Press, 105.

56 Ibid., 20-21.

57 Tsou, T. 1986. *The Cultural Revolution and post-Mao reforms*. Chicago: The University of Chicago Press, 30-31.

not helpful. Joseph Stiglitz provides a breathtaking list of preconditions to effective development that effectively invalidate “Washington Consensus” programs:

- No externalities (no problems of air or water pollution)
- No public goods
- No issues of learning
- Perfect capital markets (in the sense that there be no missing risk or inter-temporal markets)
- No imperfections of information
- No changes in the information structure
- No asymmetries of information

In other words, Washington Consensus conditions are basically *never* applicable. Ironically, this seems to be news to scholars of the Austrian school, who do not seem to have noticed.<sup>58</sup> This policy mix according to Stiglitz has brought “palpable and huge” costs to African countries, and it has been painful and ineffective in Latin America. Finally, he states, “There is no theoretical underpinning to believe that in early stages of development, markets by themselves will lead to efficient outcomes.”<sup>59</sup> Partnership between government and private interests based on rational, local plans is probably the best advice there is.<sup>60</sup>

In spite of professed commitment to open markets, that market of all markets, the market for credit, was not only brought under control in the American Banking Act of 1981, it was neutralized. The monetarists achieved their goal of converting “low” conventional interest rates into a combination “brake pedal” and “accelerator” of the economy. That hardly constitutes faith in open markets. At the same time, they made high rates possible by eliminating the “Judeo-Christian” limits to very high interest rates, usury rates, from the law.<sup>61</sup> Thus, if markets did work in this way, highly-managed economic policy would surely stop them in their tracks.

## Widespread professional negligence

Increased knowledge should result in more stability. Many opportunities have been lost in this regard, resulting in higher economic variation and poor controls. *Figure 2, Areas where opportunities were missed*, outlines many of these.

1. *Event accounting got derailed.* Accountant George Sorter<sup>62</sup> and technologist Edgar Codd<sup>63</sup> published mutually-supportive ideas in 1969 and 1970 respectively that would have substantially improve finance at all levels had they been properly implemented. Derailment of these ideas caused significant loss to society and are a continuing travesty.

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58 Kirzner, I. M. 1992. *The meaning of market process: Essays in the development of the modern Austrian economics*. London: Routledge.

59 Stiglitz, 3.

60 Ibid., 12.

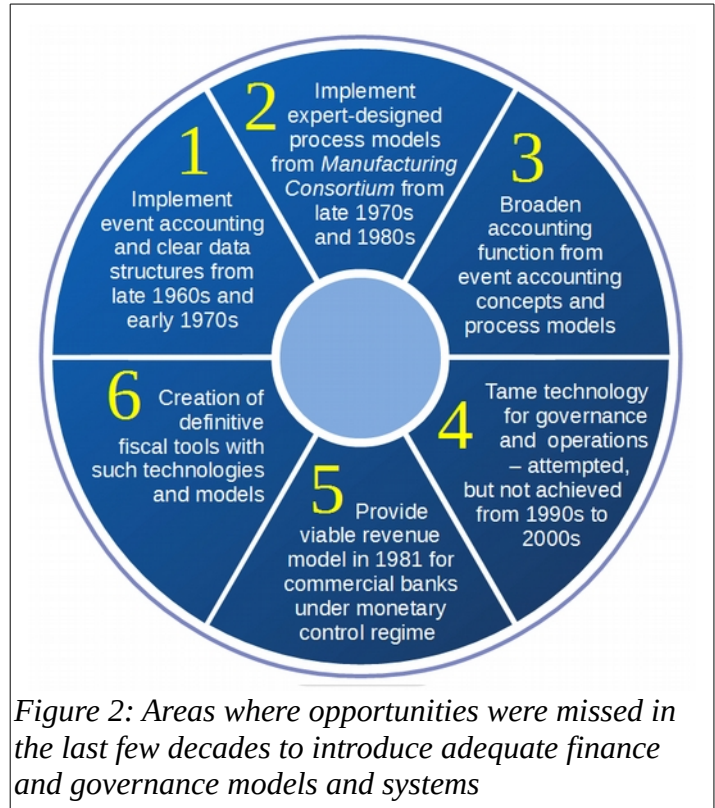
61 Greider, 170-171, 176.

62 Sorter, G. A. 1969, January. “An ‘events’ approach to basic accounting theory,” *The Accounting Review*, 12-19.

63 Codd, E. F. 1970. A relational model of data for large shared data banks. *Communications of the ACM* 13(6), 377-387.

2. *Process-centric models were ignored.*

The Brigham Young University Manufacturing Consortium developed many of the key ideas,<sup>64</sup> but they were not associated with the Shewhart models,<sup>65</sup> nor were they effectively introduced into the mainstream. Kenneth Tingey hired a New York investment bank in 1999 and they introduced the concepts to the top thirty-five technology and accounting firms under the rubric “Process Manager Consortium,” but six months of targeted marketing to their corporate development departments, only achieved two meetings and no one wanted a demonstration of prospects for user-designed systems.<sup>66</sup> Given that process mastery was not available via technology, it is not surprising that the obvious connection between the work of the Manufacturing Consortium and that of Shewhart, Deming, and Japanese innovators in process control was not discovered and utilized. This is an ongoing *catastrophe* with high costs to society and to the environment.



3. *Accounting function was not broadened.* Rather, quality was abandoned generally, ultimately resulting in legislation and policies like *Sarbanes Oxley* in the United States, which is based on an irrational hope that senior finance executives and CEOs can substantiate that controls are in place when there is no systematic way of assuring this.

64 Allen, D. K., and Alting, L. (1987). *Manufacturing processes* (Seventeen volume set of instructional materials for academic and industrial use by members of the Manufacturing Consortium). Provo, UT: Brigham Young University. The Manufacturing Consortium, led by Boeing and Eaton Corporations, included the major automotive and aerospace manufacturers, major information technology companies, and most Fortune 50 manufacturing companies of the time.

65 Shewhart, W. A. 1931/1980. *Economic control of quality of manufactured product*. New York: D. Van Nostrand Company, Inc.; Deming, W. E. 1982/1986. *Out of the crisis*. Cambridge, MA: Massachusetts Institute of Technology Center for Advanced Engineering Study.

66 This effort involved all of the large information technology companies, including IBM, Microsoft, HP, Apple, and Oracle. The large Internet-based companies were not yet very significant. All of the global accounting firms were contacted. Only Arthur Anderson showed significant interest and we met in Chicago with a senior partner, but the project was stopped by the firm's technologists. Of course, that firm was soon then terminated for lacking the kinds of controls under consideration here.

4. *Technology was not tamed.* As a result, prerogative and ignorance-driven policies enjoy the extra impetus of technology and its potential for high dissemination. Enormous social, economic, and environmental losses are commonplace.
5. *Viable finance revenue models were not designed.* This can be largely attributed to lax thinking, to “normalized deviance”. By not providing a way for financial institutions to thrive by enhancing quality, they were driven to low quality assets and questionable processes and policies.
6. *Definitive fiscal tools were not implemented.* In the absence of fluidity technologies and models leading to dual control, legislative and fiscal issues are largely left to self-regulation and prerogative. Knowledge management and use are thus severely restricted.

Many commentators bemoan the lack of solutions, but there is virtually no effort to search the literature for solutions nor for considering potential improvements from applying lessons from the past that were not fully understood nor taken. Of course, the historical record is filled with distractions which probably contributed to poor choices generally. In this case, the lack of interest on the part of the Manufacturing Consortium in disseminating knowledge of the logic barrier was a big problem. Possibly they saw that as a way of limiting competition from smaller competitors.

The derailment of event accounting concepts and structures may have resulted from misunderstanding of the importance of openness and fluidity and managing processes, but its effect was nonetheless devastating. As a result, pervasive computation has resulted in many negative outcomes from ignorant use of technological capacity and substandard governance, as technology has come to lead human endeavor, rather than support and follow.

### **Perpetuation of a narrow-minded, corporatist culture**

As markets mature and organizations become more well-established, they become more driven by finance alone and by tradition. Success breeds a narrowing of perspective, encouraged by such an organization's ability to persuade, to influence social and economic affairs, and to silence opposing forces. This is not a commercial phenomenon, but a human one. All of nature goes through stages of growth, maturity, and decline, as do we and our organizations.

There lack sufficient mechanisms to deal with these cycles, which need to be recognized and managed within society. They constitute a major challenge for government, notwithstanding that governments themselves are subject to these cycles. Many economic and political theories result from incomplete understanding of the cycles, from viewing phenomena going through certain of the stages, but without understanding of the stages nor their implications. This calls for ongoing measurement and understanding of underlying phenomena, particularly cash flow patterns for economic organizations.

By corporatist we mean authoritative, top-down organizational forms and control mechanisms with little or no consultation or collaboration with knowledge-based or distributed forms of authority or policy. Such an organization, network, or sector is managed – controlled – based on the prerogative of the primary leaders. They do so with limited knowledge, blind to perspectives, knowledge, and other forms of input that would be both timely and appropriate. In fact, as was reported to be the case at the World Bank in the 1990s, even knowledge-oriented initiatives were expressions of power and not knowledge. A red flag in this was the assumption that knowledge was a one-way proposition, only coming from “on high”.<sup>67</sup>

The activities of the *Committee on Financial Markets* (CFM) of the OECD from its organization in 1969 and earlier OECD efforts in financial market development provide examples of this limited orientation. The OECD is a highly valuable, erstwhile institution and we do not mean to criticize its contributions generally, nor its mission. The examples from this history we call out are done to demonstrate a generalized myopia with regard to governance and finance in the period in question.

The CFM 50 year anniversary report documents an increased run-up of risks in scope and magnitude to a climax in 2007, with no obvious introspection in terms of general direction.<sup>68</sup> As an example of the rosy, almost breezy sense of manifest destiny of the report, the section “A fully mature financial system: 2000-2007” was followed by a factual, but distanced review of the many system and institutional failures that led up to the 2007 crisis.

In the report, similar to other representations of these failures in governance and policy, the parties in question justify themselves by repeatedly calling attention to the lack of adequate systems and programs. Describing events dating from 1980, as previously denoted, time after time increased systemic risk was noted in this 2014 report from experimental instruments from novel commercial arrangements and from untested applications of technologies. Significant economic corrections were noted in 1982, in 1987, in Mexico in 1994, in Asia in 1997, and globally in 2000. Lastly, in spite of repeated warnings and concerns for newly-induced systemic risks, especially with regard to “exponential growth” in over-the-counter (OTC) derivatives, which had been recused from regulation, the 2007 Great Recession was documented. This came with typical statements as to how a correction of the magnitude that occurred could not have been predicted. As recorded by the CFM,

The kinds of risks being assumed by financial institutions also changed radically. Even in countries that previously had “universal banking” and/or where banks dealt in insurance, banks mainly engaged in the distribution rather than underwriting of investment or insurance products. In effect, a bank's retail or private client networks were used to market

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67 Ellerman, 121-148.

68 OECD Committee on Financial Markets. 2014. Five decades at the heart of financial modernization: The OECD and its Committee of Financial Markets. *OECD Journal: Financial Market Trends*, Vol. 2011, I (Supplement). Paris: Organization for Economic Co-operation and Development.

products originated by other firms. Banks typically continued to take the risks of engaging in credit operations and short-term trading. In the 1990s, however, banks began to assume risks that were unlike those assumed in the past. Bank-led financial groups regularly placed their own capital at risk in capital market operations. The managers of major institutions believed that in order to survive and prosper and to gain strategic advantage, it was necessary to be at the forefront of financial innovation. Operations increasingly involved OTC products that were often opaque and illiquid.<sup>69</sup>

What was driving this “freight train” of innovation? Why wasn't there more introspection? Why did the products become more and more esoteric? What is driving such apparent helplessness? Michael and David Einhorn, using “credit default swaps”, “like buying insurance on your neighbor's house,” as an example of something that was dreamed up that was beyond the comprehension of even regulators and is of questionable value to society.<sup>70</sup>

Perhaps the corporatist culture and the drive to create meaningless markets in increasingly more arcane ways results from abstraction, from the fictitious nature of corporate thinking in the first place. As it is said, a corporation is a fiction, a fictitious person. It is a derivative concept, one level away from reality. The same is true of money, which is a step away from the reality of what society needs, from value. The magic of the derivative is that with each derivative step, insight can be drawn as to the dynamics of that thing, the dynamic of that phenomenon, the rate of growth or decline, etc. This kind of thinking has proven valuable in making markets, in trade. With each derivative step, which was tragically played out in the 2000s in financial markets, the realities of tangible value are abandoned. Insight is a fine thing, but it cannot feed your children, at least not directly. For this reason, in the aftermath of the Great Recession, major institutions entered into major programs to invest in productive land, tangible land, anywhere<sup>71</sup> – Africa being a popular location.<sup>72</sup>

## **Dysfunctional global core-periphery model**

The idea of global financial liberalization may well be an admirable goal in a world of perfect markets and cohesive societies, but the results of financial liberalization efforts have resulted in increased risk on the economic “periphery” and within weakened states generally. Capital that presents itself in emerging nations through such open global networks can just as easily disappear for reasons that have nothing to do with the local economic factors. Global financial liberalization introduces uncontrolled risks to such states and associated “shock therapy” policies leave their governments incapable of

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69 OECD Financial Markets Committee, 31.

70 Lewis, M., and Einhorn, D. 2009, January 3. How to repair a broken financial world. *The New York Times, Opinion Pages*, WK10.

71 The Economist. 2015, January 3. Barbarians at the farm gate: Hardy investors are seeking a way to grow their money. *Author, Investing in agriculture*. Available online: <http://www.economist.com/news/finance-and-economics/21637379-hardy-investors-are-seeking-way-grow-their-money-barbarians-farm-gate>.

72 Dube, Tendai. 2015, August 13. Investing in Africa's agriculture is the next best thing. *CNBCAfrica.com*. Available online: <http://www.cnbc africa.com/news/southern-africa/2015/08/13/africa-agriculture-investment/>.



providing needed social protections and controls. A result is political imbalance that skews away from democratic regimes and social equity. This results in an uncertain economic foundation for development.

Zülküf Aydin describes such developments in graphic terms, which demonstrates prescience and understanding due to the fact that he wrote this before the Great Recession of 2008:

The fact that major economic crises emerge within a few years of the introduction of financial liberalization indicates a causal relationship between the two. The Turkish crisis of 1994 and 2001 show remarkable similarities to the 1997 East Asian Crisis in that both were due to the fast inflow of capital for four years and then the precipitous flight of both foreign and domestic capital.<sup>73</sup>

In Turkey, he describes both too much money coming in and too little. Furthermore, using Turkey and East Asia as examples, he describes mis-investments and “herd-like” behavior largely due to “excessive capital”. Most particularly, he indicates, “...capital borrowed on a short-term basis was used to finance public and private consumption thus generating instability and indebtedness.”

In recent years, short-term speculative currency trade has reached 60 times the value of international trade in goods and services. Financial openness and computerization has permitted capital to come in and go out in a flash, in search of relative gains based on ever more miniscule variations in interest and exchange rates between countries.<sup>74</sup>

It is not difficult to understand how such conditions are in and of themselves counterproductive. Indeed, countries that “broke the rules” with regard to Washington Consensus-style reforms have been able to deal more effectively with this “sloshing” of capital back and forth around the world. China, of course, is “Exhibit A” in this regard. Although there has been financial market liberalization to a degree, growth has been more specifically stimulated by the state. Many of the current complaints about China are tied to the level of openness that exists, particularly in the stock markets, and volatility that has been seen of late.

Chile is an interesting case because it was one of the most pure neoliberal, open markets cases due to the power of the Chicago School in the 1970s and early 1980s.<sup>75</sup> On the other hand, Chile took specific steps in 1981 to protect the people from basic social risks by privatizing social security in a novel way that levied a cost, but helped to ensure social stability.

The social security reform of 1981 transformed most of the state-administered, pay-as-you-go civil pension fund into a system of privately administered and capitalized pension funds,

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73 Aydin, Z. 2005. *The political economy of Turkey*. London: Pluto Press, 16.

74 Ibid., 19.

75 Ames, B. 1987. *Political survival: Politicians and public policy in Latin America*. Berkeley, CA: University of California Press.

financed by a 10 percent compulsory tax on wages and salaries, revenues from which are transferred directly to the funds. In this way, the public sector has kept the current pension obligations while losing most of the contributions. This reform has generated an additional annual fiscal deficit of 3 percent to 4 percent of GDP...<sup>76</sup>

Such social programs have proven their merit in Chile in the intervening period. The program now serves as the basis for a strong combination of public and private payment programs:

At the end of 2011 it covered 13.2 million people, or just over three-quarters of the country's population, while seven for-profit private insurers ... covered 2.9 million Chileans, or one-sixth of the population. Approximately 1.1 million Chileans are either insured through other welfare systems, such as the Armed Forces and the Police, or have commercial health insurance only, or have no insurance.<sup>77</sup>

Such protective programs were not part of typical financial liberalization programs. Chile has a long tradition in social responsibility, being the first country in 1886 to establish a formal health program. The 1981 legislation, responding to this long tradition, provided a foundation for soon-to-be implemented reforms that protected Chile from risks of financial liberalization.

Santiso attributes Chile's achievements not to the blind application of free-market orthodoxy but to flexibility in policymaking from the mid-1980s onwards. In other words, the crucial moment was not, as the liberal right argues, the 1973 coup against Salvador Allende, the socialist president, but the catastrophic banking crisis of 1982, the product in part of economic policies pursued by the radical free-marketeers known as the Chicago Boys. During the 1990s, when countries such as Argentina and Mexico implemented shock therapy and quickly sold off state property, a newly democratic Chile controlled its exposure to world financial markets and maintained its efficient copper company in public hands. The result was a relatively smooth encounter with globalization, a decade of consistent expansion and a 50 per cent reduction in poverty levels.<sup>78</sup>

Even in the publication declaring the Washington Consensus in 1990, there was acknowledgment of the insufficiency of the program: "Even today the IMF has no research available on how to proceed from stabilization to growth."<sup>79</sup> Even then, however, there was awareness of the need to support consistent social requirements, as indicated by Rudiger Dornbusch.

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76 Meller, P. Chile. In J. Williamson (Ed.) 1990, *Latin American adjustment: How much has happened?* Washington, DC: Institute for International Economics, 78.

77 Bitran, R. 2013. Explicit health guarantees for Chileans: The AUGÉ benefits package. Washington, DC: The World Bank, 2.

78 By, B. 2006, July 31. How Chile cooled its ideological fever. *Financial Times*. Available online: <https://next.ft.com/content/f9d1f780-1fe7-11db-9913-0000779e2340>.

79 Dornbusch, R. 1990. *Panel discussion on Latin American adjustment: The record and next steps*. In J. Williamson, 1990, *Latin American Adjustment: How much has happened?* Washington, DC: Institute for International Economics, 315.

Inefficiency in government is indeed pervasive, and public-sector employment in many countries is unjustifiably high. But there is no presumption that budget adjustment should fall here primarily rather than on the tax side. There is a need to restructure public-sector spending from consumption to investment and productive services, but the level of spending certainly is not excessive in most Latin American countries. More spending, absolutely and relatively, should be devoted to infrastructure and to health and social services for the poorer groups. The current composition of spending is not only unproductive but probably also regressive.<sup>80</sup>

So, why is openness to wild global financial flows still on the agenda when they were held in question even before the Great Recession of 2008?

Contrary to the belief held by the proponents of the Washington Consensus, liberalization in Turkey has not reduced the role of the state in the economy, it has simply given it a new role: that of an agent of international capital. In this role the Turkish State has been the main cause of the current [pre-2008] crisis... The complete liberalization approach should give way to an approach that will emphasize the importance of a long-term development strategy in which the state will play a significant role.<sup>81</sup>

Openness *per se* is not seen as the panacea, but engagement, supported by targeted efforts to support the capacity of the people, while development cooperative development models that will instill independence and prosperity.<sup>82</sup> A critical development function of government in such conditions is to provide good education and to ensure the widespread availability of information and knowledge.<sup>83</sup> The last thing the currency needs to do is to *introduce* instability and risk.

Truly, the development question is one of establishing productive capacity. Our point is that production in a cooperatist environment with strong social roots, rather than in a dispassionate, arms-length corporatist environment, is a desirable objective. The question becomes whether exports eventually become possible, for which liberal, open international trade is desirable – and possibly necessary at some level.<sup>84</sup> Aydin describes such programs.

The increasing debt of less economically developed countries is used as the main mechanism to persuade them to accept the role of providing labor-intensive off-season fruits and vegetables, beef, poultry, fish and flowers. This necessitates the abandonment of

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80 Ibid., 324.

81 Aydin, 260.

82 Fajnzylber, F. 1990. Unavoidable industrial restructuring in Latin America. Durham, NC: Duke University Press.

83 Wolff, L., and Castro, C. M. Education and training: The task ahead. In P. P. Kuczynski and J. Williamson, 2003, *After the Washington Consensus: Restarting growth and reform in Latin America*. Washington, DC: Institute for International Economics, 181-212; Economic Commission for Latin America and the Caribbean. 1990. *Changing production patterns with social equity: The prime task of Latin American and Caribbean development in the 1990s*. Santiago, Chile:: United Nations.

84 Hirschman, A. O. 2013. The political economy of import-substituting industrialization in Latin America. In J. Adelman, *The essential Hirschman*. Princeton, NJ: Princeton University Press, 126.

the production of the traditional crops for both export and domestic markets. The production of crops like wheat, barley, cotton, tobacco, hazelnuts, and sugar beet is discouraged through the withdrawal of financial support for their producers. Such policies will have serious implications for food security and the agricultural sector as a whole in Turkey...

The process of de-agrarianization [in Mexico since 1992], reflected in the decline of grain production in the *ejidal* sector, has created food security problems for the rural masses.

...It seems that a similar scenario is unfolding in Turkey... There are strong signs that the agricultural sector is shrinking, the production of traditional crops is declining, unemployment in rural areas and migration to urban areas are increasing and worst of all Turkey is becoming more and more dependent on food imports. These are all signals of the new wave of social and political tension in both rural and urban areas.<sup>85</sup>

Aggressive dependence on this process is questionable, though. We reflect on the original question of what was driving the British to be so adamant that China open up to its array of “trinkets” as the emperor saw them.

### **Lack of recognition that the core-periphery model became a network**

The world changed with the delivery of fresh copies of the new book “The Rise of the Network Society” by then-Berkeley professor Manuel Castells to the coffee tables of Silicon Valley venture capitalists in 1996. The book signaled total victory on the part of the Silicon Valley in particular. The volume was actually the first of a Promethean trilogy that announced where the world had arrived and how it was that it was never going back. The point was, networks had won out in every aspect of life; hierarchies had lost out. One did not need to read the books to know this and most probably did not, at least the venture capitalists, who assuredly were too busy “doing deals”. Ankie Hoogvelt at the time indicated that the networking phenomenon temporarily relieved a growing core-periphery problem.

I have come to believe ... that the long capitalist crisis which began in the 1970s has temporarily been “resolved”, albeit in a manner that provides stability and prosperity for a global minority while keeping at bay the global majority.<sup>86</sup>

Castells had made one critical error in his work, one that has not been adequately investigated. This difference has made all of the difference. It is about power. The question is, who gets it? The answer for the times was clear – computer programmers. In 1996, Castells blithely wrote:

...the network morphology is also a source of dramatic reorganization of power relationships. Switches connecting the networks (for example, financial flows taking

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85 Aydin, 254-255.

86 Hoogvelt, A. 1997/2001. *Globalization and the postcolonial world: The new political economy of development* (2<sup>nd</sup> ed.). Baltimore, MD: The Johns Hopkins University Press, xvii.

control of media empires that influence political processes) are the privileged instruments of power. Thus, the switchers are the power holders. Since networks are multiple, the interoperating codes and switches between networks become the fundamental sources in shaping, guiding, and misguiding societies.<sup>87</sup>

Misguiding societies, indeed. The presumption is that if a programmer works for a certain kind of organization, the views, preferences, skills, knowledge, and processes of that organization are going to be expressed in the network as a result of the work of that person. Castells continues on with that theme, particularly removing individuals as possible switches and power holders.<sup>88</sup> This is a breathtaking example of naivete, as information hostage-taking by technologists in organizations is commonplace. As long as fluidity is absent, individuals and technical combines will be able to co-opt the powers and networked capacities of organizations, a particular problem with respect to governance and finance on a global scale.

Two of the most challenging problems in finance can be considered here. First, how is financial engineering, particularly derivatives products, able to continue to grow, even now, in the face of obvious problems, including global systems risk from such arcane constructs? Second, how is it that the control crisis – as in the litany of ongoing basic financial frauds that recur again and again and again without resolution? Witness a statement by Harry Markopolos, a professed expert in both areas:

I look at numbers the way other people read books. For example, obviously computers are pretty darn fast doing math and calculating the value of derivatives, but even today there are certain calculations that are so math intensive that even a computer can choke on them. Occasionally a situation arises in which there is a second derivative, called *gamma*, which is the rate of change in the first derivative, *delta*. Don't try to understand this calculation, unless you intend to trade options. You'll never need to know how to do it and there is no test at the end. And you certainly won't need to know it to understand how Bernie Madoff successfully ran his worldwide Ponzi scheme for decades. Bernie's fraud was much less sophisticated than that.<sup>89</sup>

This is typical logic. The technician “shiny” problem that is fun to play with that “you” wouldn't understand. Why is it important to know the rate of change of the rate of change of the rate of change to the “n<sup>th</sup>” power? Well, perhaps it is to “beat out” another quantitative competitor that has only gotten to n-1. Where does all of this computation lead? Perhaps to the same place that all of the bitcoin mining on the frozen slopes of the North lead? Nowhere that matters to the economy of goods and services. In this case, it does matter in terms of governance and finance because it is bankers playing this game of

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87 Castells, M. 1996. *The rise of the network society: Volume I: The information age: economy, society, and culture*. Malden, MA: Blackwell Publishers, 471.

88 Castells, 2011. Castells, M. A network theory of power. *International Journal of Communication*, 5, 776.

89 Markopolos, 10.

“one-upsmanship.” With each new derivative, money is being created. Perhaps that is why it is so much fun.

As long as the technologies can hold everyone else hostage, all forms of knowledge will suffer from such skewed ways of thinking. All sectors of society thus suffer. The good news is that the electronic network exists. It is particularly well-suited to participate in a more nuanced, more responsive approaches. As to governance, economics, and finance, many helpful models have been created, largely on the periphery.

Economics of the periphery has both capitalist and Marxist roots. Related concepts have always existed where there is trade, the Chinese and Islam civilizations providing two of the most interesting examples. The point is that where there are channels of trade and associated freedoms and information networks, there are many centers and many peripheries. There are many hubs and many spokes. The nature of a functional economic system is to support them all. The hub is creative; the spokes consume. The core sets the rules; the periphery lives by them – *whether they like it or not*.

Thus, capitalism grew out of trade between Europe and the East – particularly as investments in great ships and insurance on their cargoes entered the arena. It was a struggle for the Europeans to assert themselves at the core, but industrialization happened there, tilting the balance in their favor. Marx noted “cracks” in the capitalist model, declaring it to be unstable, to be replaced by a more humane social system based on sharing. Problematically, when his followers did gain power, they had to engage in industrialization of their own. In the process, they came up with their own core and periphery, the Soviet system.

Wisdom resulted from life on the periphery. In the post-Soviet experience, Poland led out and there were many followers that “made it,” but with ongoing stability issues, as Westernization was painful and without very many obvious ways to build on prosperity. In Asia, government-initiated programs were very successful with regard to growth, but there were associated financial crises. Chile was an example of strict application of traditional neo-liberal development models up to the 1980s, where they creatively broke the rules, which gave them some autonomy. Other countries, including Turkey, were able to benefit from such examples.

As it turns out, both core-periphery models were too simplistic. There cannot be but one core and one periphery, but unnumbered cores and unnumbered peripheries. Wherever there is an idea, there is at least one such network. A new core and a new periphery exists with the manufacture of each new item, the creation of each new work of art, the birth of each new child. The economy, a construct of society, needs to reflect all of these.

When something happens, it triggers other based on many factors, including financial and legal imperatives of the realm in question. There will be implications with regard to the nature of the people

and the characteristics of the institutions in question. As to development, there is “uneven and combined development,” as pointed out by the Marxists a century ago and acknowledged through the maintenance of the Bretton Woods system within the last seventy years. Why can't knowledge in this field, of economic and societal development, be documented through fluidity and enlivened by global data flows in support of policy and finance generally? Additionally, with regard to finance generally, if a “Harry Markopolos” can recognize a fraud by means of numbers, why should we need to wait around for six years or so for someone in position to do something about it to decide to do so?

The same can be said for all forms of knowledge and all pockets of society. Why wait?

## **Resolving the control crisis through dual control**

Combining process with data in an environment that can be commanded by authorities and experts introduces an unanticipated benefit. Not knowing that such a condition can exist, even the most deep-thinking organizational theorists, governance experts, executives, or managers would reflect on its benefits. The result of this is the total and complete *fungibility* of knowledge. This is to say that knowledge becomes  $n$ -dimensional as to its utility to the organization and the tasks at hand. There are many ways to look at a thing or a situation. The more you know about the thing or situation, the more ways you can see to look at it. When you have someone that has spent decades studying that thing, he or she will see layers of implications instantly that could not possibly be verbalized. There will be no common vocabulary to do so; much of what is known may be mathematical and symbolic.

When you arm such people with the ability to tie data together with processes, they will immediately take off in directions that are not only unknowable by outsiders, they will find themselves going down alleys they had never thought of. This will result in an explosion of discovery, some of which will be linear, but some of which will bounce from context to context, presenting situations that may involve any of a variety of parties. On the one hand, it may imply that others need to be brought into the design process, but it may also mean that the thing in question could apply to new situations and to new people or groups. One non-scary aspect of this new-found fungibility of knowledge is that much functionality will thus be available to users that will allow them to function at a much higher level of knowledge, not only doing the task at hand, but learning about it.

The biggest control question is the agency one. Who is responsible? This is a knowledge-driven question. Without fluidity it is virtually impossible to answer the question. The deeper you get into the science, it is a scientific question. The deeper you get into policy and finance, it is a policy or finance question. The deeper you get into any issue, the more knowledge in that area is required to understand what is going on. A designer without specific expertise in the fields in question needs to guess at how to deal with the issue within the system. In most cases where fluidity and dual control are not present, a very broad group of people that are granted access given the situation and a very loose set of rules on

how they may or may not be called into account to do the thing in question. Deep within an issue, the designers themselves would not have understood what they were doing, nor the implications. With so many unanswered questions, users may even have the option of whether to use the system at all or have control over whether particular steps need to be taken.

This introduces the greatest control conundrum of all: Whether to comply or not. If the people responsible for carrying out a task have the option of doing the task correctly or not, of complying with the knowledge-driven process as laid out by the system in question as determined by data that is independently and credibly gathered, forget about control. Forget about governance. Forget about a knowledge-driven approach and optimal results.

The basic technology, its features for access and navigation, need to be available and tightly integrated. Then, based on knowledge-driven design, users need to be designated by the experts and authorities. This will allow for the system to function, supporting whatever functionality deemed necessary. Refined understanding of political and economic actors is essential in establishing permanent solutions. In a dual control environment, there is an active juggling of context back and forth such that the appropriate agent in one case may be the wrong one for another situation that may look equivalent from an outside perspective, that is from outside of the perspective of a process that is under way.

## Who do you trust, and when?

In order to evaluate the status of global financial governance, understanding of the history of governance and finance is advisable. This is important in the understanding of the general picture as well as that of individual nations in question. To accomplish this, We have referenced histories of Western civilization in this regard as well as those of China and other Eastern traditions. This is done to understand issues and trends, also to provide perspective as to current challenges. Refer to *Appendix A – Governance actors in Eastern history* for more detailed histories, particularly with regard to China.

In modern democracies, for example, citizens elect representatives to make political decisions on their behalf, and the elected representatives appoint bureaucrats to implement these decisions. Similarly, in modern societies, people hire lawyers, doctors, and child-care providers. All of these relationships can be seen under the right circumstances as involving delegation in a context of asymmetrical information.<sup>90</sup>

This is all well and good. In the “post-invisible hand” world of governance and finance, we can see that the question is much more complex than has been understood generally.

Global governance seeks not only to prevent and limit war but also to manage the global commons, to promote development, and to regulate global financial markets.<sup>91</sup>

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90 Bevir, 42.

91 Bevir, 83.



The significance of development is pretty clear, as is the significance of financial markets, but what is meant by “global commons”? This is a mounting question, to be sure, exacerbated by climate change and population growth. Our point is not to belabor the point, but to call attention to knowledge generally and science in particular as keys to resolving related governance issues. Knowledge and science are central to understanding the boundaries of the global commons, to recognizing such conditions when they present themselves, and addressing related issues in each case. If they are not aspects of the global commons in their own right, they need to be called upon under critical conditions, to be leveraged in good faith for the general good. A means of accomplishing this is certainly a common need.

For this reason, we include “knowledge” in the historical PCISKM agent model to include the effects of such knowledge in government and governance models of the past.

### **The PCISKM global governance actor model**

As to historical actors, we offer the following combination in the form of a governance model. The question is in the balance of such actors in the regimes in question. This is used in Appendix A and B and in prescriptive analysis in Part II and Part III.

*Persons (P).* This refers to individual persons or a typical family unit including parents and children when they function as a unit. This is often called the nuclear family. Of course, such a definition ignores dynamics of family relations, gender politics and related social issues. These are of critical importance, to be sure, but beyond the scope of this analysis. Wherever such questions are pertinent, We will try to raise them.

*Clans (C).* These are collections of family units, joined by relation, by ethnic and culture tradition, and often by religion. Clans involve patterns of shared decisionmaking, often shared ownership, and collaborative activities and commitments. Often dating to ancient times, clan relationships are typically tied to longstanding traditions and related processes.

*Institutions (I).* These are organizations with a particular economic or social mission. One large subset of these is the large collection of private enterprises organized for purposes of profit and economic gain. These are typically organized in a top-down, corporatist model, often with independent stakeholders. They may enjoy multinational rights, carrying out their activities in many parts of the world. They are typically dedicated to particular industries or specific areas of concern. Non-government organizations, regardless of legal or economic form of organization fit this definition.

*States (S).* These are individual nations with sovereign powers over a geographic area. They have ultimate legal rights and government powers. They may have different forms of organization and different means of distributing power and authority. In the postwar era, international development organizations have attempted to support development of specific finance and governance structures and

patterns among nations based on what has been termed the “Washington Consensus,” and combination of structures and processes to support effective financial management and governance.

*Knowledge networks (K).* These are networks of individuals and institutions charged with understanding, documenting, and disseminating knowledge throughout society. Mostly staffed with highly-skilled scientists and knowledgeable practitioners, such organizations enjoy the support of the national and regional governments, also with multinational support. They organize themselves and function in international networks, for the most part “without borders.”

*Multilateral organizations (M).* Aware of the need for effective governance generally, nations of the world have established international organizations for purposes of achieving objectives of mutual and universal importance. Such organizations and institutions have existed as long as nations have interacted together. Permanent international or multilateral institutions were established with United States leadership after World War II, resulting in several such organizations. These include the United Nations, the World Bank, and the International Monetary Fund. Other such organizations include the World Health Organization, the Organization for Economic Co-operation and Development, the Asian Development Bank, and many other regional and sectoral organizations. Their purpose is shared commitment, shared support, and shared decisionmaking.

## PCISKM empowerment and global governance

Policy needs to be connected with the needs of the particular economic actors as per PCISKM. In spite of duplication, it is of interest to look at relative policy strengths in the current environment by category. *Table 1: International finance and governance conditions*, demonstrates many of these.

Table 1: International finance & governance conditions				
Sector	Issue	Governance	Private life	Influence
G7	Uncontrolled cyclicalities	Corporatist	Freedom, but hazardous; end of leisure with establishment of farming communities	PCISKM
G20	Globalization of economic governance and finance	Corporatist; corporatist client	Very rapid urbanization; network technology assimilation	PCISKM
Emerging/Asia	Unclear development path	Corporatist client; socialist	Very rapid urbanization; network technology assimilation	PCISKM
Emerging/Africa	Unclear development path	Corporatist client	Very rapid urbanization; network technology assimilation	PCISKM
Emerging/Latin America	Unclear development path	Corporatist client	Very rapid urbanization; network technology assimilation	PCISKM
BRICS	Need for alternative governance and fiscal models	Corporatist	Very rapid urbanization; network technology assimilation	PCISKM

Table 1: International finance & governance conditions				
Sector	Issue	Governance	Private life	Influence
China	Need for alternative governance and fiscal models	Socialist/corporatist	Very rapid urbanization; network technology assimilation	P I SKM
Middle East	Need for alternative governance and fiscal models	Corporatist	Very rapid urbanization; network technology assimilation	P I SKM
Middle Income	Need for alternative governance and fiscal models	Corporatist client	Very rapid urbanization; network technology assimilation	PC I SKM

As can be seen in the *Table*, none of the agent models includes emphasis for *Clan*-based policies. In the more industrialized countries, emphasis on *Institutions* and *States* can be seen. In no case is there a significant emphasis from a policy standpoint on *Knowledge* use. Furthermore, there is relatively little emphasis in the emerging and poor sectors with regard to *Personal* life issues, a factor that surely has confounding relationships with poor quality of life conditions in such areas.

The need for alternative development and fiscal models is widespread among the sectors. Perhaps a lack of diversity in governance alternatives leads to a lack of desirable results. The corporatist model may well result in narrow perspectives. Certainly from a dual control perspective, the corporatist approach suffers from limitations from vertical and horizontal control perspectives.

From a PCISKM perspective, should all categories of actors receive policy emphasis? In a sense, that may be an easy answer, but probably not a useful one. It is surely a rich mix of interests that brings longstanding results. From a policy standpoint, focus on the needs of particular sectors with respect to governance is warranted. Results from such efforts are not likely to be zero sum with regards to overall results, but relative power may well be. Individual interests and influences need to thus be balanced for the general good of society. This is the most fundamental aspect of governance-oriented policies on national and international levels.

As can be seen in the qualitative reviews of governance actors in history in Appendixes A and B, periods of stability in Eastern civilizations demonstrated high commitment to Clans in particular, these mostly being cohesive peasant families, extending to communities. Living in a rich set of networks and social commitments, they proved resilient above all, providing a consistent foundation for social, political, military and governance cycles brought on by other factors. As described by Owen Lattimore, in China, this brought stability “dynasty after dynasty” through recurrent phases of water conservancy, work to fulfill on capacity thus created, oversupply from population growth, leading to depression and disorder. New strong-man dynasties would “call out the survivors of the scholar-bureaucrats to

organize the infinite activities of listing and checking the men at work and filing ... returns of grain transport and grain tribute” that made it all possible.<sup>92</sup>

...neither in the tearing down of the structure nor in the rebuilding of it was the foundation touched. The society as a whole remained centripetal and the old way of life the only one that was understood.<sup>93</sup>

It is this fundamental social fabric that provided groundings to China throughout its history. Similar patterns can be seen in Islamic history and in the review of Poland's history. In China, in spite of being continually “swindled” and cheated by the mandarins and the merchants, in Islam as different ruling caliphates came and went and in Poland, where belligerent neighbors helped themselves to whatever they wanted, it was the social cohesiveness of the common people that brought consistency and that sustained the cultures and economies in question. Perhaps more could be done to explicitly support the efforts and traditions of such people.

## Notes on histories and cultures

Historical review of this kind bring awareness of particular cultural elements that have presented themselves in the past. The three targeted civilizations, those of China, Islam, and Poland, have exhibited interesting and useful characteristics with regard to governance and the possible application of dual control.

### China's dual commitments to grain and to moral administration

Agricultural productivity of China's peasant farmers was the mainstay of China for century after century. Based on a rich, highly networked cultural fabric, the humble workers of China provided for the basic needs of the people, mostly in the form of rice and wheat. They did this with great honor, for, as the peasantry was kept in its place by means of policy and economic subjugation, they were spoken well of, and thought well of. They thought well of themselves, fostering a culture of self-satisfaction and fulfillment.

The mandarin system proved itself over the centuries. The dream of Confucius and Mencius in times of chaos during the Warring States period proved prescient – more than this. Rigor in the Confucian testing and selection process not only instilled higher norms in terms of moral expectations, it served to select intelligent, motivated local leaders, whose principal requirement in the counting grain and adjudicating its acquisition may have otherwise been a dull, arduous task. The system worked through generations of lifetimes. When conquering regimes assumed command of the nation following the dynastic cycles, the mandarin system was there, available and willing to be turned to the task. They fought

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92 Lattimore, O. 1940/1951. *Inner Asian frontiers of China*. Boston: Beacon Press, 45.

93 Ibid., 46.

innovation, although they were very artful in the management of water and local infrastructure, such as transportation.

## **Poland's obsession with governance**

Nestled between great powers, straight on the paths between Europe and Asia, Poland and its people represent a conglomeration of histories and traditions with deep roots on all sides. They live through collective forgetfulness and forgiveness, but the fact is you can never fully forget and forgiveness is dangerous. As a result, the Poles are the world's masters in the harboring of trust. This most valuable and dangerous commodity is something that comes at great price, to be metered out without letting go.

It is not that Poles have not learned to trust; it is that they understand its value relative to the famous gold of Ophir, which pales in comparison. The Poles are famous for their elective kings. For good or for ill, they have never allowed for a strong monarch. They have always had a problem with centralized power, having developed many legislative traditions to protect minority rights. Historically, this has been said to have weakened Poland relative to its neighbors, resulting in partition and subjugation of Polish civilization. There surely is truth to this. On the other hand, it resulted in strength among the nobles, along the periphery. This resulted in several cases in which Poland proved to be a powerful ally, such as in the defense of Vienna and the decisive power of the famous Hussar cavalry in 1683.

The preoccupation with minority aristocratic rights in Poland, coupled with the showy, militaristic nature of Poland's aristocratic Szlachta class, resulted in a very different governing environment than in China, with its imperial assumptions, where central power was assumed and the mandarin would not take its eye off of the townships and the peasants for a minute. The Szlachta could not ride in, literally on a white horse, and “save the day” if they weren't off someplace else in the first place.

## **Islam's obsession with process**

Followers of Islam call it jurisprudence. It underscores everything Muslims do, how they carry out what is to be done. This is sharia law, “The way to the watering hole”. The point is, everything must be done correctly. Stated in another way, there is a correct way to do everything. How does a Muslim know what that is? How do they know what to do? There is a process for this: First, there is the Qu'ran, the primary, canonical record. Then there is the Surrah, also referred to as the Hadith, which is additional guidance of “a path, a way, a manner of life”. After that comes the judgment of someone, but who? It may be someone religious, it may be someone intelligent.

After the long line of authorities and experts, there is the question of whether you can make up your mind for yourself. You can, many say, but this, too, involves highly circumscribed processes. There is a process for determining this. Under no circumstances can an adherent just “make something up”. This is very much like the dual control process, where the prerogative of individuals of responsibility is constrained by processes that reflect both policy and science. Islamic governance does refer to a

concept called the “open way”, which involves voluntary actions one might take after all sharia pathways have been taken:

To thee we sent the scripture in truth, confirming the scripture that came before it, and guarding it in safety: so judge between them by what Allah hath revealed, and follow not their vain desires, diverging from the truth that hath come to thee. To each among you have we prescribed a law and an open way.<sup>94</sup>

Of late, attempted to apply these principles, an Islamic form of banking has been formulated. Of course, Islam has always involved finance, but of a community kind. It is the challenge of the West, and the recent failure of the West, that has brought attention to this issue.<sup>95</sup> There are two provisos. First is a strong denial of interest; money is not to be “commoditized” and “monetized” in this way. This is to say that traditional debt instruments are not applicable. First is a requirement that sharia law be honored. This, of course, is a governance issue. In Turkey, there was an attempt, and a failure, to achieve legal requirements for Sharia boards to be appointed in the case of Islamic financial arrangements. Nonetheless, the commitment is to resolve any and all issues in order to provide solutions that will make a difference on a large scale.

Many of the current financial institutions emerged out of the drive and guidance from social needs. The 2008 global financial crisis put the current economic system under the questioning of the collective memory and increased future expectations and the adoption rate of alternative financial models.<sup>96</sup>

The general worldwide consensus held regarding the recent global economic crisis is clear. It states that high liquidity, reckless lending practices, and the rapid pace of financial engineering all helped create complex and opaque financial instruments used for risk transfer. The crisis occurred due to several factors, including the lender-borrower relationship and a multitude of informational problems, absent regulatory supervisory oversight, failure in risk management and accounting models, etc. Meanwhile, a different frame of mind exists with which to conduct investments. Specifically, a similar crisis would not occur under an Islamic Financial (IF) system. This is because Sharia does not permit most of the underlying factors that inevitably led to the aforementioned crisis.<sup>97</sup>

In this, dual control and fluidity could factor in. Not being aware of the possibilities for fluidity, for arming technology with the processes of nature and society, of religion, reformers, whether from the East or from the West, imagine people sitting around the campfire, if not the boardroom, adjudicating complex processes, considering their unique contextual “wrinkles” and making sure that things are

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94 Qu'ran 5:48.

95 Ustaoğlu and İncekara, 2014.

96 Ustaoğlu, M. 2014. Introduction. In M. Ustaoğlu and A. İncekara (Eds.), 2014, *Islamic finance alternatives for emerging economies: Empirical evidence from Turkey*. New York: Plaggrave Macmillan, 2.

97 Saleh and Ustaoğlu, 59-60.

done the right way. In this sense, then, you would want to have a “Sharia board or directors” to carry out such a task. Such a group, utilizing Western models, without technology capable of keeping up with complexities and changing contexts, would fall into the same pitfalls as exist in Western finance. Likely the best example of this is the Sarbanes Oxley legislation, which requires certification of the legitimacy, or at least, effectiveness, of processes and controls by business leaders that would have no knowledge whatsoever of the integrity of such processes and would do what everyone else would do under such circumstances, which is to hire more accountants.

Under such an arrangement, under dual control, a system could require that Shia or Sunni hadiths be deployed with regard to the funds and their use. This could occur in conjunction with authoritative and science-based requirements. Truly, the question in Islam is one of authority. There is no question as to whether there is a right way, or a correct way. Processes are closely adjudicated, with the possibility that individuals or groups in question may ultimately decide some things for themselves following established norms. Armed with dual control, Islamic finance could make good use the Islamic commitment to process based on such authority. Financial instruments, typically equity instruments, given restrictions not only interest, but on details of the use to which money is to be put, could require that not only sharia law be applied generally, but specific versions of sharia law based on commitments and beliefs of the investor. Similar decision models can incorporate social, environmental, and commercial questions. These could be mixed and matched.

## Gaining control

Optimistically, we could title this section “re”-gaining control, but such optimism is not really warranted, given the wide swings in markets and other cycles in modern times. Surely, few would wish to return to the old times of stability, with grinding boredom and intractable servitude and labor. Modernity has its enticements. Could stability be gained now? Could governance do this? Could finance support this?

Such outcomes are the promise of dual control. Control is not a bad thing. It is the best of things, the outcome of good governance, the fruit of the application of hard-earned knowledge from study and experience. It is important that we are not referring to controlling people, but in controlling processes. We all do this. As we all respect the power of processes, embrace them, learn from them, we come to know the benefits of knowledge-driven actions, actions that have been thought through and approved by people and organizations we acknowledge and we trust. Government has a big role to play – most of all in that it provides the only real guarantee that dual control can exist. This will not come from commercial parties, from the corporatist frame of mind. Once armed with a proposition, they will push it to the limit, given whatever constraints they are faced with. No market is safe from them, a fact that requires constant vigilance by all.

Policy needs to encourage collaborative efforts. This is the case within societies in general and in very specific, organized ways. We could use more collaborative forms of organization. We could stand to view the missed opportunities we have listed in a new light. Had they been implemented earlier, when they could have, they would not have had the cumulative effect they could bring to us now. With reflection, by enlisting the best knowledge available to us and by structuring programs to promote the interests of those who ground our societies most, we may well establish a model that will bring stability and adaptability for a very long time.

The three civilizations demonstrate the importance of civility at the core of society. Communities must be whole and secure. Three factors existed in each case in the fundamental sociality of their communities:

1. *Something to believe in.* In Islam, this was Islam, which forms a belief system on heaven and on earth. Poland's people have been strongly Catholic, with other religious traditions entering in in some cases. China's people quite uniformly have believed in and benefited from Confucianism, which is not strictly a religion, but a belief system that has supplied peace and harmony for a very long time. It has also shown to be compatible with religion of various forms, particularly Buddhism. Credibility in such systems of faith and philosophy is best coupled with some level of complexity and sophistication, if not mystery. Think of the job of the Chinese mandarins over the millennia, a matter essentially, ultimately, of measuring stores of grain, principally rice. It would be inadvisable to not provide them with a way to clear their minds with such a task.
2. *A rich social fabric.* This is true in all three cultures. We do not want to make the case at this point that family relations *must* serve as the core of such associations, but we do not see any evidence in the histories that we have reviewed that would serve to refute this. *It is not a good bet that family relations do not matter.* Unfortunately, such is a bet that China has entered into, copying secular programs from the West that severed families from businesses, also severing private lives from working lives.<sup>98</sup> Western programs are highly committed to the idea of organizations as “fictitious persons” while very real, longstanding family relationships and commitments are largely ignored.
3. *Something to keep busy with, at least in part involving cultivation.* In China and Islam and Poland, few have been the people through history with time on their hands, with nothing to do. Perhaps there have been those of the Polish szlachta class who could play with their horses, or family members of the mandarinates who could while away their time, or children of sultans or caliphs who could be lazy, but this would have been far from the norm. Not only did the people need food to survive, they benefited from their attachment to nature. It is good for people to get their hands dirty and growing food provides independence that has served China and Poland and Islam many, many times. It is interesting how Marco Polo's description of well-ordered Beijing in the 13<sup>th</sup>-14<sup>th</sup> and many courtyards and gardens in the city “given to the heads of families”.<sup>99</sup>

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98 Prost, A. 1991. Public and private spheres in France. In A. Prost and G. V. Vincent (Eds.), *A history of a private life, Vol V, Riddles of identity in modern times*. Cambridge, MA: The Belknap Press of Harvard University Press, 16-22.

99 Lattimore, O., and Lattimore, E. 1968. *Silks, spices, and empire: Asia seen through the eyes of its discoverers*. London:



Such communities, although critical to the foundations of these three civilizations, are doubly at risk from foreign intrusion. The system in its entirety, even if stable otherwise, is subject to superior technologies from afar with regard to economic questions if there is openness and trade, military destructiveness if there are international items of dispute.

We will consider these issues in Part II and Part III of this work. It is a huge leap of logic – if not faith – to think that after balanced living patterns have been established over unfathomable periods of thousands of years, they can be replaced overnight by something else that itself hasn't passed the test of time. By this, we mean hundreds of years, thousands of years.

Perhaps if Western countries had not had to come “knocking on China's door” in late 2007 with the unexpected news that they were out of money and they had no idea of functional solutions, the idea of an indigenous development plan would not have been warranted. It may be a good thing that instability “came knocking” when it did, not ten or twenty years later, propounding irrational hopes. Let us understand and resolve the problems now so that they do not become more entrenched.

## Part II – China's coming into alignment with history

Resolution of governance issues can have two levels of effects for China. First, it can result in improved economic performance within China by removing barriers and improving productivity and competitiveness. Second, it can overcome issues of global concern and open the door to reforms that could well be made generally. The strategy we recommend is to leapfrog Western concerns by improving governance in ways that have been avoided or overlooked in the past. In this way, China and the other collaborators in this nascent effort to form a cooperative development consensus, Poland and the United Arab Emirates, will have something to offer regarding governance and development efforts in all cases.

### Wandering into quicksand: “Becoming like Sam”

Clearly, China's reforms were designed to copy Western institutions. True, there were to be differences in ownership and industry due to a higher level of national and local involvement by government entities, but markets were to be opened, private ownership was to be liberalized, and knowledge was to be gained thereby. China's four modernizations were to be an educational exercise as well as a development effort.

China's reform program seemed to have played out well up to the time of the Great Recession of 2008. The irony was not lost on Chinese leaders that the Western counterparts who had recently schooled them in economic reforms were even now coming to them “hat in hand” with requests for help in reforms of their own, not reforms of the “tweaking” kind, but of the crisis kind. Their systems had failed. They had no better solution than to inject enormous levels of funding into the system, else they suffer general economic failure and depression.

It has been pointed out that the Great Recession had the effect of increasing public ownership due to bail-out programs, something of a “Chinese development model.”<sup>100</sup> This is to say that government bailout moneys used to stem the tide of real and potential bankruptcies increased government ownership in many sectors, particularly finance. Tongue-in-cheek though such a statement may be, it is appropriate for China to come to itself and realize that perhaps efforts to copy Western institutions across the board may have been short-sighted. Perhaps the recession had to play out. Who would have thought that Western finance and governance institutions were so weak and precarious?

A long history of growth and prosperity as demonstrated by the Chinese civilization, also Islam, provides two particular benefits with regard to the subject at hand. First, confidence as to the likelihood that success can be achieved where fallible people and their institutions are concerned. China is

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100 Naughton, B. 2010. China's distinctive system: Can it be a model for others? *Journal of Contemporary China*, 19(65), 443.

uniquely poised to reflect on its past in search of answers. Second, the violent and painful end to China's imperial continuity a hundred years ago can similarly be instructive. What was missing then may help in understanding what is missing now.

### **Now, just *who* is imbalanced?**

Historical analogy is a rational pastime. This is the rationale for Barry Eichengreen's recent comparison of American policies in dealing with the *Great Depression* in the 1930s and with the Great Recession in the 2000s. He makes the case that lessons learned from the *Great Depression* were effectively applied to deal with problems of the *Great Recession*.<sup>101</sup> So many factors were different; insight was gained coming to an understanding of what similarities could be brought into understanding.

In this case there are two questions: First, why was China strong for so long? Second, what was responsible for its precipitous drop? As to the first question, the quotations in Part I herein point to likely sources of stability. We consider it in a reflexive way. China was stable because China was stable. This is to say that the country had strong, organic roots. Everything and everyone in that civilization was accounted for and there there was balance, generation after generation, and their were traditions to keep them there. Of course, there were dynastic cycles, but they served to re-invigorate the same social and economic fabric for thousands of years.

As to the second question, it could be predicted that, barring intrusion from the West, China would still be carrying as it had before. Why wouldn't it? Owen Lattimore offered his opinion that Western influences acted to forestall establishment of a new dynasty after weakening of the Manchu/Qing Dynasty by the Muslim rebellion in Yunnan in 1855 and the Taiping Rebellion in the Yangtze valley at around the same time. Interestingly, a confrontation between Islam and China at that time may have brought different outcomes than was the trend, but this cannot be known at this point. As Lattimore indicated, the Muslims exhibited "greater cohesion" at that time from extensive religious and social organization activities, at least with regard to oasis lifestyles.<sup>102</sup> Perhaps there may have been difference in the dynastic cycle; perhaps not.

The cycles of stability ended, of course. What could be done about this? This question has been searchingly pondered by the Chinese and students of China's affairs for more than a hundred years. Many probably sensed the profundity of the issue from the first 19<sup>th</sup> century canon volley from a Western ship. Some call the difference brought from the West as technology. Some call it knowledge. Others call it Westernization in general. The Chinese could not conceive of continuing on a second-rate citizens of the world. They had to embrace this new power, but they couldn't conceive of abandoning

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101 Eichengreen, B. 2015. *Hall of mirrors: The Great Depression, the Great Recession, and the uses – and misuses – of history*. Oxford, UK: Oxford University Press.

102 Lattimore, 182-183.

their beloved Confucianism. One solution was to embrace the substance of Western technology and know-how, but not the spirit of it, not the philosophy of it.<sup>103</sup>

Regardless, the result was an inferiority complex that perhaps overshadowed groundings for a superiority complex warranted on the other point. The inferiority complex is not of debatable provenance. It was imposed on them.

At the same time the factories of the industrial revolution were creating in spite of all the suffering and exploitation that they caused, new young, wealthy, vigorous, and enterprising rewards, of science and technology, a new demand for education and a vast expansion of opportunities for educated men. Beginning with Britain, then spreading to France, Western Europe, North America, and Russia, new crops of adventurers and travelers began to appear around the edges of the safe and well-paid jobs – mining prospectors, mercantile agents, religious missionaries, scientists, archaeologists, students of languages, decipherers of documents, sportsmen in search of new kinds of big game, officers on leave. It was an age in which it was assumed that any bit of knowledge might be of value to somebody, that new resources might be discovered anywhere, that new bits of territory might be worth annexing. It was disputed whether trade followed the flag, or the flag followed trade, but any way you looked at it there was expansion and excitement.

Above, all it was an age in which the men of the West assumed that they had an inherent right to go anywhere. Moreover, not only did they have a right to discover and report, but by their mere presence “where no white man has ever been before,” they somehow shed light on the benighted. It was exciting and sometimes dangerous, but not dangerous enough to make any journey impossible.

The white man's guns had everywhere made it known that the white man, if provoked, would come in force and lay down the law. This was known far beyond the most remote points to which military patrols had penetrated. In these outer zones, where the white man was known by repute before he had appeared in force, the right touch of bluff and assurance made it possible for the adventurous traveler to outstrip his predecessors and come back with reports of new discoveries. The occasional fatal casualty merely added romance to the reputations of those who came back safely.<sup>104</sup>

The onslaught from the West, which extended from Islam to China, resulted in a sense of exoticism, but also condescension. Edward Said, a Palestinian scholar at Columbia University in New York, documents this philosophy, under the rubric of *Orientalism*, as being particularly onerous when Westerners are trying to be balanced and fair. He uses Arthur James Balfour as an example using a speech

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103 Furth, C. 2002. Intellectual change: From the Reform Movement to the May Fourth Movement – 1895-1920. In M. Goldman and O. F. Lee, 2002, *An intellectual history of modern China*. Cambridge, UK: Cambridge University Press, 13-96; Schwartz, B. 1964. *In search of power and wealth: Yen Fu and the West*. Cambridge, MA: The Belknap Press of Harvard University Press 42-90.

104 Lattimore and Lattimore, 170-171.

to the British *House of Commons* in 1910 about how Egypt was historically great, but in need of Western interpretation of Egypt's historic greatness for the benefit of living Egyptians. Western knowledge formed the basis for power, leading to authority and legitimacy.

British knowledge of Egypt is Egypt for Balfour and the burdens of knowledge make such questions as inferiority and superiority seem petty ones. Balfour nowhere denies British superiority and Egyptian inferiority; he takes them for granted as he describes the consequences of knowledge.<sup>105</sup>

## Balance vs. imbalance

In 1793, the British prepared what they called a “very extensive selection of specimens of all the articles we make both for ornament and use” for presentation to the Chinese emperor in a diplomatic mission. The idea was that once the emperor saw what the English could produce, he would open the floodgates of Chinese consumption. As stated by Matthew Boulton, who headed the project:

“I conceive”, he wrote to James Cobb, secretary of the East India Company, “the present occasion to be the most favourable that ever occurred for the introduction of our manufactures into the most extensive market in the world.”

The British believed that once the emperor knew about the prospects, he would obviously want more for himself, his “court and people.” They got this very, very wrong. The emperor seemed to like a model ship, but the visit and the gifts meant nothing more to him than a form of tribute, similar to what might be given “to express their respect and devotion,” as was the custom. As to the idea of trade, the emperor responded:

We have never valued ingenious articles, nor do we have the slightest need of your country's manufactures.<sup>106</sup>

The questions here related to balance, that famous dictum from Western economists and bankers to China in our day. Why didn't China want what Britain offered? In some sense, the answer includes the concept of balance – thousands of years of it. Why did Britain so enthusiastically want to make the sale? Stated differently, why was Britain so *desperate* to make the sale, such that it led out in the process of turning the world upside down – China in particular – to get it?

Regardless of other, possibly more telling reasons, traditional Western leaders, the “Orientalists,” had an answer to why domination was necessary. As indicated by Balfour in his 1910 speech, Eastern philosophies were inferior because they lacked the concept of “self-government”. In his mind being very complimentary to the East, he said:

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105 Said, E. W. 1978/1994. *Orientalism*. New York: Vintage Books, 32.

106 The Economist. 2014, August 23. What China wants. *Author*. Available online: <http://www.economist.com/news/essays/21609649-china-becomes-again-worlds-largest-economy-itwants-respect-it-enjoyed-centuries-past-it-does-not>

All their great centuries – and they have been very great – have been passed under despotisms, under absolute government. All their great contributions to civilisation – and they have been great – have been made under that form of government. Conqueror has succeeded conqueror; one domination has followed another; but never in all the revolutions of fate and fortune have you seen one of those nations of its own motion establish what we, from a Western point of view, call self-government.<sup>107</sup>

He said it. It sounds pretty good, certainly to Western ears. What does it mean? As Said indicated, it provided justification for Western dominance. “*The West has the right to dominate over the East because the East did not historically establish a tradition of self-government.*” It may or may not be true, the underlying presumption in terms of self-government. Of course, the question of “self-government” itself needs to be looked at. It could mean a lot of things. This being said, the historical evaluation may be valid or it may not. Balfour thought it did. *That* being said, the summary *illogic* of the second aspect of the proposition stood the test of time for a couple of centuries. Domination is justified because of a tradition of self-government.

Such attitudes still exists, of course. As to a definition of self-government, Said points out that Locke and Hume may not be the best political philosophers to cite, given their writings on “racial theory, justifications of slavery, or arguments for colonial exploitation.”<sup>108</sup>

Thus, we see that the history of the last couple of centuries is grounded in a technological and geopolitical asymmetry in those times between the East and the West. The West had guns and they were willing to use them. The argument could be made that they were *excited* about using them, as the Lattimors document.<sup>109</sup> Furthermore, they were willing to go to the ends of the earth. They scoured the globe in an aggressive campaign the stretched far from its European and North American roots. For better or worse, at the beginning, the East was stable, while the West was not.

So, who has better credential with regard to stability? Embedded in the histories of China and Islam, once you get past the “technology thing,” are answers to longevity and stability. Attempts at economic and social reform should provide leverage for such factors, restoring such ideas as can apply in our times. Balasz, as cited earlier, makes reference to the highly resilient social fabric of the people as China's foundational element, organized according to family and locale – coupled with a meritocratic mandarin state that governed well, providing a continuing rational basis for carrying out what was needed. What has been the effect of China's westernization plan on China's social fabric, a key to social and economic stability?

This paper's point is not to resolve these questions, but to point them out nonetheless. They are fundamental to the decisions at hand, the idea of a “cooperatist” environment in the first place,

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<sup>107</sup> Said, 33.

<sup>108</sup> Said, 13.

<sup>109</sup> Lattimore and Lattimore, 170-172.

questioning the validity of an economic system driven by presumption of a relentless “corporatist” global governance and finance regime.

## Prospects for balance

Privatization and commercial openness have had mixed effects. We will consider these. Higher income levels have brought benefits, to be sure, but effects on family and clan ties of the urban/rural split have to be viewed with some concern. Coupled with policies in the prior era that produced an imbalance between young males and females, China faces a genuine crisis, a threat to its primary cultural elements. Copying Western financial forms and institutions can have the effect of making matters worse, particularly with regard to the organic roots of its long and unique heritage.

In the final analysis we see that it is not wise for China to copy a system *across-the-board* that has fundamental weaknesses. Of course, China of all countries cannot be ignorant of what can be learned from its history. In our case, insights from the histories of Islam and of Poland can help enrich understanding of the prospects for a modern, cooperative consensus. Continuity through rich community interactions, achievement of stability and satisfaction, these are of more than a little importance. Talcott Parsons makes a strong statement that the economy is a subset of society, that the characteristics of its existence need be derived from fundamental social realities.<sup>110</sup>

Clearly, something needs to be done with regard to the national finance regime in China. There is simply too much volatility. Coupled with this is a persistent, receding liquidity pattern, a definite sign of distress. Good news may be warranted in important sectors, but that news is drowned out by voices of concern around the world for problems they associate with China. “Bad news about China” now constitutes a daily drum beat in the national and world finance and economics press. Of course, there are also many suggestions from the West, from traditional finance institutions and commentators as to what is considered to be wrong. Many of these center around concepts as represented by the traditional Washington Consensus and economic development shock therapy. This involves strict fiscal controls, faith in unregulated markets, and Western-style corporatism.<sup>111</sup>

The question is, what is happening from a substantive standpoint, and why? What goals exist that can serve as guidelines? What general norms can be called on to help evaluate conditions? Is there unwarranted turmoil or are the complaints irrelevant and possibly misleading?

What *is* the plan? Does the perspective presented here, the prospects for improved governance and social results by means of dual control and fluidity, help to draw attention to conditions and opportunities? Are criticisms of Chinese-centered conditions valid and important or are they irrelevant

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110 Parsons, T., and Smelse, N. J. 1956. *Economy and society: A major contribution to the synthesis of economic and sociological theory*. New York: The Free Press.

111 Gurria, A. 2015, March 20. *Presentation of the Economic Survey of China to Chinese officials: OECD Economic Survey of China in Beijing*. Paris: Organization for Economic Co-operation and Development.

and misleading? In a way, the situation can be seen as very much like that of the May 4<sup>th</sup> Movement of a century ago. It can be said that China is trying to become Westernized, if not in philosophy, then in structural and policy fact, also in terms of technology, *whatever that is*. More to the point, from the standpoint of economic institutes, China is trying to mirror the United States in some obvious ways, complete with corporatist structures, institutionalizes equity mechanisms, and capital markets that reflect what are generally held to be open market characteristics.

The point is to encourage China to make more direct usage of scientific knowledge than exists within the Western corporatist model. The levels of scientific knowledge that are able to “squeeze through” the corporatist model and its typical technologies is meager, indeed. This may be news to policy leaders in China and elsewhere, who have assumed as is the case in the West, that this is happening automatically – witness the teachings of the Austrian School and their assumptions of ongoing equilibrium.<sup>112</sup> Even more problematic than this, what passes for scientific knowledge that does get through is a pale imposter of real knowledge in the individual and collective heads of the scientists themselves.

China is trying to becoming more “corporatist”, where its history has shown to be “cooperatist”. As can be seen in Western organizations, which provide the corporatist governance model, China's economic governance is headed into an unsure, dispassionate “arms-length” future rather than to leverage its long and successful history of cooperative living, largely based on the family community interests, and passionate social cleavage.

## China's path to reform

Given this curious direction, there has been wisdom in China's choices compared to those of other countries, most specifically, Russia.<sup>113</sup> China functions from a position of strength, whereas Russia does not enjoy similar status. China has not lost political and legal control as a result of its restructuring efforts. Growth has been unprecedented for many more years than most thought possible. Single party rule, a key objective, does not seem to have been compromised. Current reform efforts belie problems in this regard, but perhaps lack of action in such areas would have been evidence of a greater problem.

Reconsidering policy since integrative economic reforms began can be considered in stages. Mutual recognition of China and the United States in 1979 signaled willingness to engage one another's societies and the mutual economies of the leading countries in question. This was accompanied at that time by a documented willingness to extend liberties to Chinese citizens in terms of individualistic economic opportunity. Longstanding restrictions on individual effort were softened and people were encouraged to engage in private business. Famously, “to get rich is glorious” became the “battle cry” as

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<sup>112</sup> Kirzner, 38-54.

<sup>113</sup> Buck, T., Filatotchev, I., Nolan, P., and Wright, M. 2000. Different paths to economic reform and Russia and China: Causes and consequences. *Journal of World Business*, 35(4), 379-400.



small-time entrepreneurship returned to China.<sup>114</sup> Loosely-coupled policies continued through the 1980s, taking a markedly institutional turn after that.

Rather than waiting for markets to arrange themselves in this more assertive period of the 1990s, China significantly increased the size of its economy through fiscal stimulus, particularly in public sectors, such as in transport and telecommunications.<sup>115</sup> This effort was different than the government stimulus efforts of the famous Asian Tigers in China's region, Japan, South Korea, and Taiwan, which made strategic *industrial* investments for this purpose.<sup>116</sup> There was significant interest by foreign interests in utilizing China's potential in manufacturing, as China leveraged lower wage levels from urbanized workers on an unprecedented level. China was able to raise hard currencies in this way and by privatizing government enterprises through stock issuance without losing majority control of the entities in question.

These developments are amply documented and well known to the public. Less well-known are innovations in the capitalization and management of China's many state-owned enterprises.<sup>117</sup> The 1990s brought institutionally-centered reform to center stage. While reforms in the 1980s were relaxed and decentralized, even entrepreneurial, the 1990s brought earnest negotiations over the separation of government from enterprise management, which is to say from a simplistic perspective to separate governance from management. Governance was represented at two levels, Communist Party leadership behind government agencies and their officials. One of the critical factors driving political events at the end of the decade of the 1980s was inflation, which served to force the hands of those who wanted to go slow in making reforms. The intensification process of the 1990s may be compared, at least in precedent if not in magnitude and purpose, to the shift under Lenin in Russia in the 1920s from *New Economic Policy* arrangements, a fairly benign program for home-grown entrepreneurship, to more aggressive state-driven industrial policy under Stalin, which was more oriented toward centralization and large-scale industrialization and infrastructure projects.<sup>118</sup>

The efforts in the early 2000s to establish an accounting framework for relationships between the government and its many large enterprises broke new ground for such relationships. Much work in the past has been in a relentless process of privatization of dysfunctional state-owned enterprises. Little effort had been extended to fix such relationships. resulted in the development of corporatist

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114 Schell, O. 1984.1985. *To get rich is glorious: China in the 80s*. New York: Mentor, 14.

115 Naughton, B. 2009. The impact of the Tiananmen Crisis on China's economic transition. *China Perspectives*, 2009/2, 67.

116 Kim, E. M. (Ed.). 1999. *The Four Asian Tigers: Economic development and the global political economy*. Bingley, UK: Emerald Group Publishing Limited; Johnson, C. 1982. *MITI and the Japanese miracle: The growth of industrial policy, 1925-1975*. Stanford, CA: Stanford University Press.

117 Naughton, B. 2010. China's distinctive system: Can it be a model for others? *Journal of Contemporary China*, 19(65), 456-457.

118 Gregory, P. R., and Stuart, R. C. 1981. *Soviet economic structure and performance*, Chapter 4, The Soviet industrialization debate. New York: Harper & Rowe, 76-99.

enterprises and a corporatist approach generally. This was taken directly out of the Western “playbook”, ignorant at the time of limitations and weaknesses of such institutional models, which were not going to be disclosed for another ten years or so, until 2007. Indeed, Western leaders did not even know they existed, nor even do they know what their full implications are now. As stated by Barry Eichengreen,

...the very success with which policy makers limited the damage from the worst financial crisis in eighty years means we are likely to see another such crisis in less than eighty years.<sup>119</sup>

That is a very poor prospect, given the standard set up by China, Islam, and India.

## Achieving social balance

China's opening to the West has resulted in an array of industries and institutions that are much like those in the West in terms of operations and technologies, but different in terms of governance and ownership. There are many private firms, but the preponderance of economic activity is carried out by government-owned enterprises. Such enterprises participate in key strategic industries, including petroleum and refining, metallurgy, electricity, and military industry, plus telecommunications.<sup>120</sup> Motivation was highly engineered in such systems, but they were still designed to administer top down governance and management models.<sup>121</sup>

Manufacturing activity was fueled by mass urbanization, in part made possible from family-based incentives for agricultural production introduced in the early 1980s, which brought on significant improvements to agricultural output. Nonetheless, by 2010, only 40% of China's labor force persisted in the countryside, a process that had partially reversed itself with the global financial crisis. From 2002 to 2007 alone, almost 75 million people moved to the cities for jobs.<sup>122</sup>

This condition is part of an obvious worldwide phenomenon. People in all regions are migrating to urban environments, obtaining work in corporatist environments. Urbanization of this kind is not necessarily a good thing for individuals or for their governments. It can have devastating implications for families and for the fabric of society in general. In China, for example, young males in the countryside have fewer opportunities for marriage as emigration grows, causing them to look elsewhere for wives, at a cost.<sup>123</sup> The problem, brought on by the one child policy, which limited the number of females for several generations, has been acknowledge recently though modification of that policy.

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119 Eichengreen, 387.

120 Naughton, B. 2007. *The Chinese economy: Transitions and growth*. Cambridge, MA: The MIT Press, 303.

121 Naughton, B. 2008. SASAC and rising corporate power in China. *China Leadership Monitor*, 24; and Naughton, B. 2008. Claiming profit for the state: SASAC and the capital management budget. *China Leadership Monitor*, 18.

122 Naughton, 2010, 458.

123 Ruwitch, J. 2015, December 11. China police search for missing Vietnamese brides: Paper, *Reuters*. Available online: <http://www.reuters.com/article/us-china-vietnam-brides-idUSKBN0JP0R420141211>.

The problem has been deepened by a trend for urbanization on the part of young girls who, like those pictured in *Figure 3: Hostesses on a break...*, have acted on clear preferences for city living, with independence and lifestyle opportunities currently only available in the city. By the year 2020, it is estimated that there will be 30 million “surplus bachelors” in the country, while young ladies congregate in the cities. It is reported that there are eight young single women in Beijing for every young single man.<sup>124</sup>

Given the corporatist nature of this work, it does not follow that such young people have their traditional families and societies to fall back on, to relate to and depend upon.

Perhaps technology helps to mitigate this problem. From the perspective arrived at through Part I, the combined problem of urbanization and corporatization strikes to



*Figure 3: Chinese hostesses on break from an automobile exhibition. PHOTO: QILAI SHEN/ BLOOMBERG, WSJ <http://www.wsj.com/articles/the-future-of-texting-e-commerce-1451951064>.*

the core of China's culture and the underpinnings of the Chinese civilization. How, it must be asked, can the problem be resolved, lest at least a generation be lost and the Chinese way of life be substantially harmed? The problem within China mirrors that between young Chinese farmers and their foreign wives. Contracted for in monetary terms, they, too, have shown a preference for leaving. Vietnamese brides who have stayed with their rural Chinese husbands have demonstrated a strong desire to return regularly to their Vietnamese homes, particularly in holiday times. This may point to a part of the problem, but its resolution assuredly runs more deep.

Castells provides insight as to what is happening, with a hopeful assessment as to where it may be resolved.

I consider it very likely that, with the spread of women's struggles, and with women's increasing awareness of their oppression, their collective challenge to the patriarchal order will generalize inducing processes of crisis in traditional family structures. I do see signs of a recomposition of the family, as millions of men appear to be ready to give up their privileges and work together with women to find new forms of loving, sharing, and having children. Indeed, I believe that rebuilding families under egalitarian forms is the necessary foundation for rebuilding society from the bottom up. Families are more than ever the

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124 Clover, C. 2015, December 18. “The mystery of China's missing brides. *The Financial Times Ltd.*, China Society, 4.

providers of psychological security and material well-being to people, in a world characterized by individualization of work [and] destructuring of civil society...<sup>125</sup>

The urbanization process will slow down in any regard, reaching population limits, but underlying structural change is probably irreversible; reverting to an isolated, agricultural form of sustenance would not be feasible even if it were desired. Given that so many have experienced a taste of modernity, sustainable or not, it is not likely that they would enthusiastically elect to return to the countryside under such conditions. Would such a move even improve agricultural productivity in the new regime? It does not necessarily follow that it would. Under adverse circumstances, however, many of the people would likely return if they could, as occurred briefly after the recent recession. This being said, there is little chance that a return to former conditions is imminent, or even possible, if it were advised under crisis conditions.

This leaves China with considerable vulnerability should the international manufacturing demand shrink to a significant degree.<sup>126</sup> The urbanization process, the “big leap” to urbanization and manufacturing work, is causing a significant fissure in China's social structure. Trading millenia of cooperative work efforts in highly cohesive clans and communities for a corporatist accounting of any kind is a major change in a very short period to be sure. There have been significant social challenges to be sure, securing wives for young men in the countryside being a prominent recent example,<sup>127</sup> coupled with a preference for young women to live in the city, enjoying single lifestyles.<sup>128</sup>

In Part I, we documented three aspects of atomic, community life that characterized the foundations of not only China's longevity and social strength, but those of Islam and Poland. These were a belief system, a rich social fabric, and ready means of occupation – something to keep the people busy. We must wonder how Western emulation has affected these historical strengths of China. As to a belief system, Confucianism was supplemented with Marxist, Leninist, Stalinist, Maoist thought. Now, with wholesale embrace of the very vehicles of capitalist activity that was anathema to those philosophies under Deng Xiaoping and subsequent leaders, that situation has become complex and difficult. Re-emphasis of Confucian philosophies is surely a good idea.

As to the social fabric, this is similarly problematic. Where is the Chinese family headed? This is a core ingredient in any cooperative consensus that could be established, considering what can be learned from the three civilizations in question. It is not just related to urbanization, it has to do with specifically how the people work and live. Social cohesion and the core capacity of the nations in

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125 Castells, 1998, 349.

126 Luttwak, E. N. 2012. *The rise of China vs. the logic of strategy*. Cambridge, MA: The Belknap Press of Harvard University Press, 95-99.

127 Ruwitch, J. 2015, December 11. China police search for missing Vietnamese brides: Paper, *Reuters*. Available online: <http://www.reuters.com/article/us-china-vietnam-brides-idUSKBN0JP0R420141211>.

128 Clover, C. 2015, December 18. “The mystery of China's missing brides. *The Financial Times Ltd.*, China Society, 4.

question are highly related. Success in making such a cooperative economic conversion has fundamental implications with regard to the “3 Cs” and the related development models, of course. Capacity must be identified and encouraged, cooperation must be nourished based on the nature and depth of relationships in the community in question, and currency must reflect the legitimacy and success of the efforts in general.

## Capital and society

Islamic tradition provides important guidelines in this regard. Currency according to Islam is not to be commoditized. It is not to be cast into the realm of human affairs with little or no concern for its effects, good or ill.<sup>129</sup> Dual control can provide improved means of achieving such goals, but the very nature of the financial system, particularly with regard to capital markets, are directly related to such issues.

The three community factors considered at the end of Part I provide guidelines for a cooperative development model: (1) Something to believe in; (2) A rich social fabric; and (3) Something to do. Perhaps what people believed in during earlier times can help them to understand what to believe in now and how to do so. Of course, many people have faith, but find it difficult to carry out that faith with real or imagined resistance from society in general or the state in particular. Surely there are ancient rites and inhumane acts that might be performed that would be unacceptable legally, but a policy environment that allowed people to follow religious practices, particularly privately, would enhance the relationship between the people and their governments.

From a dual control perspective, belief is an active thing, comprised of processes. This augurs well for Islam and its process-oriented roots, Confucianism, too. Prayers, ordinances, traditions, all of these are to be carried out in controlled circumstances, with associated expectations as to outcomes. Such an orientation to belief based on processes can help to recognize opportunities for mutual understanding and support for many belief systems, including logical, rational, and metaphysical approaches to faith and belief.

A rich social fabric? This, too, involves many processes, traditions being oriented toward behavioral expectations and highly contextual situations. As to keeping busy, one conclusion that can be drawn from the histories of stable societies, people generally have a high tolerance for repetition if the other conditions are met.

Establishing economic capabilities through the 3C's of capacity, cooperation, and currency are challenging. Based on findings from the historical reviews in Appendix A and Appendix B, doing so in ways that encourage clan-based projects would help to provide the kind of stability that is desired generally. As can be seen through history, such programs tend to be very effective. In the first case,

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<sup>129</sup> Ustaoglu and Incekara, 2014.

there is a challenge in terms of scale. It is one thing to encourage the prospects for small family businesses. Large family or clan-based businesses become a power unto themselves. This being said, there need to be mechanisms to encourage a beneficial “dance” between such enterprises and the state. This is not new to China, but it is a tender subject to be sure as prevailing attitudes about capital and social classes collide.

The second question is one of scale. Is it possible to encourage high levels of capitalization and competition in family contexts? In Asia, only South Korea has demonstrated facility in this area in the case of the several *chaebols* that compete very effectively, thriving in fact in their ability to call upon a broad array of available resources due to their sizable scale of operations.<sup>130</sup> The program brought growth, but then passivity and corruption set in, calling for international assistance in 1997.<sup>131</sup> It would be important to have the former without the latter.

China's efforts in the establishment of a corporatist environment based on managerial incentives in government-owned enterprises can bring benefits as to cooperative partnership opportunities and managerial approaches that may “meet in the middle” between the two forms. Although we have presented evidence that neither corporatist nor cooperativist organizations are particularly effective with regard to information and knowledge – at least as they disclose it to the public – the corporatist model demonstrates some advantages with regard to enlisting and grooming people with particular kinds of expertise, such as in engineering, science, and technical environments. Whereas in a cooperativist environment – particularly one that is family or clan-based – existing family members are expected to fill in where needed, gaining skills to be sure, but not necessarily profound education or expertise.

Manuel Castells refers to “wholly people's owned firms” and “collective enterprises” managed by collective entrepreneurs who “shared the benefits of their enterprises.” He makes reference to “bureaucratic entrepreneurs” as key participants in

...they invest in business on behalf of the government institutions they represent, either by themselves, in association with other bureaucracies, or, increasingly, lining up with foreign investors. These mixed enterprises are the core of China's new capitalism. It is a highly decentralized capitalism because it follows the contours of provincial and local alliances, and of the business networks to which they connect: a capitalism that is oligopolistic in local markets, and competitive at the national and international levels.

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130 Numazaki, I. 1998. the export-oriented industrialization of Pacific Rim nations and their presence in the global market. In E. M. Kim (Ed.), *The four Asian tigers: Economic development and the global political economy*. San Diego, CA: Academic Press, 82.

131 Lee, S. H. 1998. Crisis in Korea and the IMF control. In E. M. Kim (Ed.), *The four Asian tigers: Economic development and the global political economy*. San Diego, CA: Academic Press, 209-228.

...since access to government institutions, and to party-controlled resources, is critical to be in business, and since opportunities are plenty, there is little interest in dismantling the system, or opening it up while everybody is dedicated to their personal “primitive accumulation”.<sup>132</sup>

This is to say that they represent a combination of corporatist and cooperatist traits. This is an environment that could be perhaps adaptive. There are advantages in that personnel issues can be made with regard to expertise, not familial relationships. This can be helpful from an operational standpoint. Of course, there are personal benefits, as indicated. Does this or can this extend to family or clan benefits? Of course, it does in that individuals are members of families, but perhaps there are ways of leveraging more cooperativist models.

What doesn't register in the Chinese system is social or political innovation or related initiatives. Westerners are quick to point out that they view such a societal characteristic with disdain. It is perhaps important to point out that this has never been the case in China, least of all for a very extended period. Through history, the Chinese were committed to understand and assimilate Confucian models of propriety and morality. Of course, a great deal of philosophical introspection occurred a hundred years ago in the aftermath of the fall of the Qing Empire. Even at that time, their concern was to preserve their Confucian and philosophical groundings while learning to make use of Western technologies. Even the radicals who embraced wholesale assumption of Western culture did so from a Confucian standpoint.<sup>133</sup> As was said of Yen Fu's philosophy:

Progress would come through the psychological transformation of great numbers of individual Chinese who were to cultivate in themselves the “strength, intelligence and morality” the nation needed to build a powerful enlightened modern culture.<sup>134</sup>

There is individualism, but of a communal kind. This was similar to post 1911 statements of Liang Qichao's with regard to a modified Confucianism to meet modern needs.

As against Western “individualism” and “hedonism,” Liang offered the antidote of “familism” (*jiāzú zhǔyì*), identifying the fundamental familistic values as “reciprocity,” “respect for rank,” and “concern for posterity.” Of these three virtues that last two were seen as particularly functional for modern nationalism. They encouraged a spirit of collective solidarity and self-sacrifice in building the future and confirmed the moral legitimacy of a political elite based on talent as against democratic leveling.<sup>135</sup>

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132 Castells, M. 1998. *End of millennium: Volume III: The information age: economy, society, and culture*. Malden, MA: Blackwell Publishers, 300, 301.

133 Furth, C. 2002. Chapter 1: Intellectual change: from the reform movement to the May Fourth movement, 1895 – 1920. In M. Goldman and L. O. F. Lee (Eds.), 2002, *An intellectual history of modern China*. Cambridge, UK: Cambridge University Press, 17-18.

134 Ibid., 27.

135 Ibid., 54.

Social and philosophical underpinnings such as these point to quite a different relationships between social and productive capital than is prevalent in the West. Although focused on relationships directly as opposed to legalistic processes such as in Islam, it implies much more conservative forms of finance and capital. It should come as no shock to Westerners to understand that, while not making use of democratic terminology of the West, which emphasizes restrictions on individuals put upon by groups and organizations. The Chinese conceptions are more oriented to contributions by individuals to organizations and society, particularly family, which is another view of something similar.

## **Capital markets and society**

Probably the biggest challenge with regard to society and the economy comes from capital market efforts. How does the enterprise obtain the capacity to provide its products and services on the scale that is desired, or according to potential otherwise. Capitalization has been seen in modern times as an international proposition, fueled by the desire to achieve higher levels of leverage and investment using domestic as well as foreign markets. Use of financial capital is one of several strategies. Others include the famous tactic of “begging, borrowing, and stealing”. Another includes the imposition on the good will of friends.

Historically, this was virtually always carried out by families. To the best of their abilities, they parents and their children would grow things, make things, and engage in their trade. Cultivation and production may have been carried out in the most adverse of circumstances. Extended families would also work together, extending the effort from a family to a clan. By being careful and conservative, and through consistent, hard work, they could build up a reserve from which to function on a higher scale. Of course much work of this kind is to meet personal and family needs. Trade developed because of surpluses and the desire for what was not available due to the family effort. This formed the basis for trade over many millenia. Much trade took place between China and Islam, later with Europe.

Europe entered into trade with great gusto, particularly the Portuguese, the Dutch, and the English. In the process, they invented a different form of capital, that of joint stock companies. In that way, they were able to bring larger sums of money together, to acquire more items to put at risk to sell, and to build large vessels, mostly sailing ships. This was a risky proposition, also resulting in the invention of insurance to cover investors in event of loss.

For some reasons, this phenomenon became more and more aggressive as to scale and as to financial inter-mediation, the use of money independent of trade. Of course, the European states were small. This was a way to exercise imperial prerogatives, which played out over several centuries. As scientific developments let to the development of more and more powerful technologies, many of these translated into weapons of destruction. Some of these were used throughout the world to force the issue. This was famously the case of China in the 19<sup>th</sup> century in particular with regard to imperial ambitions, in the Middle East in most specifically in the 20<sup>th</sup>. Did the level of extension of those small states result in



their aggressiveness or was it something else? Furthermore, how is it that finance, the servant of trade and economics, became the master of all, expanding all of proportion beyond either?

The point of the Beijing-Warsaw-Abu Dhabi Consensus is to participate in global governance and finance, but not to fall prey to excesses that have assumed center stage. The question is in the establishment of balance and sustained prosperity. This brings us to the question of what kinds of capital markets are needed to meet the needs of society, not just in China, but on a global level?

A number of strategies have been employed in China's reform, including the establishment of some private equity exchanges and private stock markets, in Shanghai and Shenzhen. Capital acquisition tactics have been "on the table" in China since 1979, when it was suggested "rural enterprises could self-finance through selling shares." Stock market activity had begun in China in 1882 with the Shanghai Pinghuai Stock Co. and was terminated in 1952<sup>136</sup>

General Secretary Jiang Zemin, when asking American bankers about stock markets in 2002, "expressed concern about his countrymen's proclivity to speculate."<sup>137</sup> Indeed, he had done so in a meeting set up by a major American bank, which "wanted to set up a fully owned and operated securities business in that country but was restricted to joint ventures."<sup>138</sup> He did so through a family connection of Mr. Jiang as to avoid competition for the bank from within China or without. The point was, "open up markets, open up markets." Once again, as in the OECD review, what is driving this engine for capital markets, new products, this drive to "innovate."

It is important to keep this in mind: What bankers in the current environment are talking about are not open markets. Recollect Stiglitz' concerns, outlined in Part I, as to the prerequisites of open, viable markets, the information requirements and the existence of conditions that cannot be manipulated by the parties in question. A market can exist only where there are *no externalities* (no problems of air or water pollution), *no public goods*, *no issues of learning*, *perfect capital markets* (in the sense that there be no missing risk or inter-temporal markets), *no imperfections of information*, *no changes in the information structure*, and *no asymmetries of information*.<sup>139</sup> Stiglitz fails to mention deception, although it could enter into most of the items he did bring up.

Proponents of open markets, those of the Austrian School, make reference to a "market process" by which knowledge and information is represented by price levels "as a systematic process of mutual discovery by market participants." They make reference to ignorance with regard to the future, but not of the present, nor of the past. Here we see the breathtaking assumptions about the integrity and ubiquity of knowledge, along with naivete of inestimable depth. Perhaps they are confusing the

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136 Walter, C. E., and Howie, F. J. T. 2006. *Privatizing China: Inside China's stock markets*. Singapore: John Wiley & Sons (Asia) Pte. Ltd., xvii-xviii.

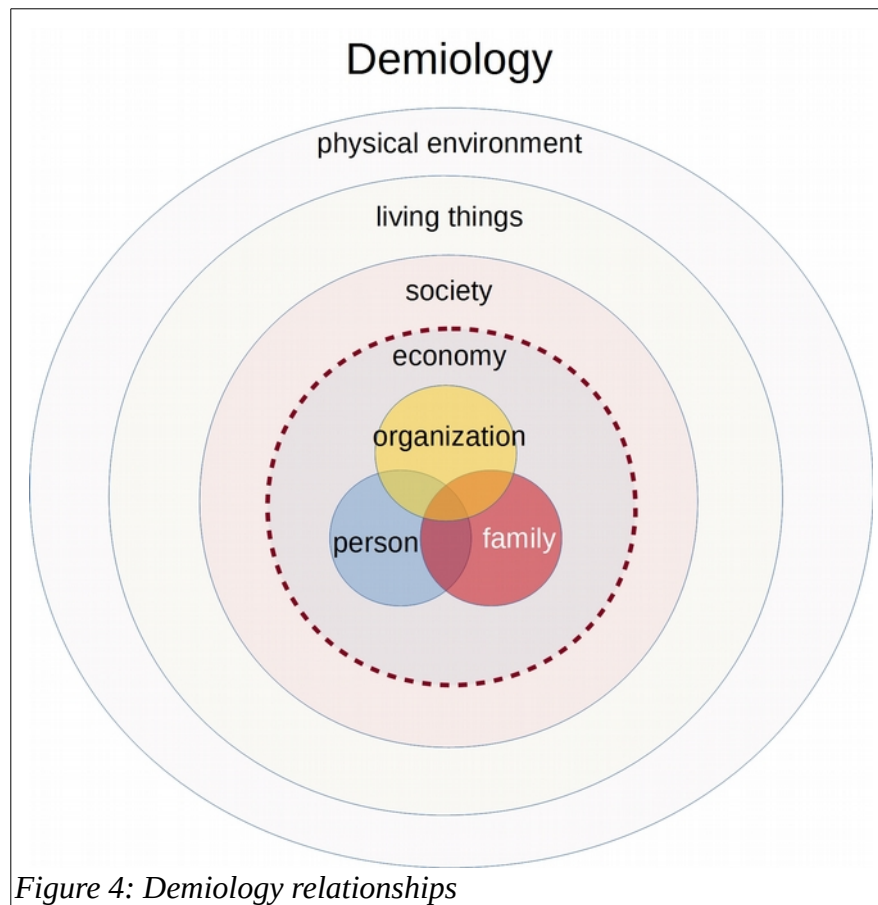
137 Paulson, 11.

138 Ibid., 125

139 Stiglitz, 3.

economy of nature, where information is ever-present and available to the economy of mankind, where information is very sketchy, assiduously hoarded, and used as an economic weapon.

*Figure 4, Demiology*, shows relationships from social associations between persons, families, and organizations, up through the economy, which is an artificial construct to society, to biological phenomena, and to the physical environment. These exist, nested in place, with the economy being a human invention to support relationships and transactions. The Austrians seem to be describing that economy and not the human construct, which is subject to untold stopgaps and dead ends.



Continuing with this frame of reference, witness the process of equilibrium in action as described by Kirsner, from the Austrian perspective:

What renders the market process a systematic process of co-ordination is the circumstance that each gap in market co-ordination expresses itself as a pure profit opportunity. It is the existence of these profit opportunities which attracts the attention of alert entrepreneurs. A gap in co-ordination is itself the expression of sheer mutual ignorance on the part of potential market participants. The profit-grasping actions of entrepreneurs dispel the ignorance which was responsible for the profit opportunities, and thus generate a tendency

towards co-ordination among market decisions. In this way economic theory is able to understand how market prices, market allocation of resources and market distribution of incomes can be understood as the outcomes of a systematic equilibrating tendency – a tendency indeed never completed but, at the same time, never completely suspended.<sup>140</sup>

Firstly, and most importantly, it is critical to note that once established, entrepreneurs are in position to create gaps, as Kirzner describes them. Surrounded by like-minded people who have much to gain from commercial association, such entrepreneurs only need to make plausible arguments, be they far from the best, most application knowledge in the matter. The idea of equilibrium is foreign to much of the artificial human economy. This state of suspension Kirzner describes, that is more like the reality of markets – particularly financial markets, which stand at the pinnacle of artificiality. If there is a tendency in artificial markets, it is against, not toward equilibrium. This can be predicted in Kirzner's statement alone. If entrepreneurs gain from the gaps, wouldn't it only make sense for them to create them whenever they can?

Such considerations bring us to consider what capital market policies would serve the needs of China and its people? First, it is not beneficial to participate openly in pretended markets that are not even functional in the country's in which they are principally governed. This is certainly an invitation to folly. Not only will outcomes thus be compromised, there is potential for loss of sovereignty, being the “tail of the dog”. Second, following pretended market structures does not allow China to leverage its unique heritage in governance. Cooperative models surely have different needs and requirements and their use can best be employed in more proportionate, stable financial regimes.

Where characteristics of markets can be established, China should help to establish them and promote their use. This is a possibility in a dual control environment.

## **Cooperative financial instruments**

Business activity requires “a step in the dark.” In one way or another, something needs to be done to start an enterprise by committing time, spending money, and setting something up so that you can engage in the business at hand. This is the case whether engaged in merchandising, where you need to acquire something to sell, or in manufacturing, where you need to bring together many things to produce products before you can make them to sell to someone else. If the enterprise already exists, you will need to find some way to acquire it, to own it, or to take it over.

You will need to be able to convince others of the goodness of what you have or will have to offer. This involves promotional expenses of some kind – preparation of materials, travel expenses, or other expenses to make yourself and your enterprise known to them. This is many much more difficult because you will find you are not alone. Not only do you have direct competitors – or alternative

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140 Kirzner, 12.

providers that may look like they are competitive from someone's perspective – or you simply need to attract attention to your offering by people that have many other things to do with their time and their resources.

If you are alone, all of this needs to come from your own pockets, your own resources. If you are starting up with family members, there are more “pockets” to be accessed. If you are starting with others, more pockets still. One problem is that the more people are brought into the picture, the more complicated the issues become, not just ownership and management, but with respect to the work to be done. Such questions date to time immemorial. Someone needs to decide what needs to be done. Someone needs to do it. Someone needs to keep track of it all. Someone needs to maintain contact with outsiders, some of whom have a direct interest in what is going on, such as customers or suppliers. Others may have other responsibilities, making sure that certain things happen – or don't happen.

In a “cooperativist” environment, there is a great deal of cohesion among the parties. Historically, they have often been related, members of the same family. Other examples include best friends, members of the same community, or other for whom there is a high degree of affinity or shared experience and culture. For the most part, in a cooperativist enterprise, there is a high degree of collaboration and sharing in the decision process, as everyone has a say in what is to be done and how it is to be done.

In a “corporatist” environment, the people in question may not even know each other. They may have nothing in common other than that they are called in to work together. They are typically motivated by income to be gained from carrying out the work in question. There may or may not be any other groundings for being together – cultural or ethnic or interpersonal. Participants in such an environment may or may not even know much about each other. Such working environments can run the gamut from open and engaging or highly authoritative and oppressive. In a corporatist environment, there is a strict structure of authority. Only certain people have input in what is to be done; the rest are in inferior roles, charged with carrying out related tasks as they are directed.

Finance itself shares the same kind of differences. In a cooperativist enterprise, ownership tends to be more widespread within the participating group, possibly even attached to something other than each person's direct investment. For example, in a family business, each person may have ownership even though the investment came from a pooled source or from one relative. In a corporatist environment, ownership is more strictly tied to the amount of cash contributed, or some equivalent tangible value given to the enterprise.

Equity is a representation of ownership in the enterprise. Along with debt, equity is typically considered in a corporatist environment to be a security. A security is a financial instrument that allows for separation of capital from management. By entering into a security agreement, an investor or lender turns the money in question over to someone else to spend or manage as they wish. There are

regulatory and contractual protections to parties on both sides in typical corporatist security arrangements. The same may be the case on cooperativist enterprises. By entering into a security arrangement with an outside party, a cooperativist enterprise would be compromising its fundamental structure, at least to a degree. This should be done carefully, of course.

Such kinds of arrangements are problematic from the perspective of Islamic law, as will be discussed presently. There are transactional as well as governance issues. It is possible that dual control can help to deal with at least some issues regarding securities and Islamic requirements.

In the traditional Western model, equity basically represents two things. First, it represents a share in the profits of the business. After paying all of the bills for a period, the residual funds collected and not spent belongs to the equity holders according to their ownership. It may be distributed to them, it may be reinvested, or it may be used for other purposes that they agree on as a group. In a fully cooperative venture, equity percentages may not even be formally divided up. The family or the social groups may deal with such issues in some other way that satisfies everyone involved. In a corporatist firm, the rules must be followed in a very strict manner when it comes to distributing profits and making other decisions as to what should be done with them.

Second, equity represents decisionmaking power. Even in some cooperativist enterprises, in the case of major decisions, owners add up equity proportions – typically shares of stock – to determine what is to be done. In other cooperativist environments, they may resolve such issues in other ways, congruent with the family or the social system. In a corporatist environment, this is always carried out carefully and strictly “by the letter.”

There are other nuances with regard to organizational forms, relationships among participants, and profit shares, also referred to as “residual claims.”<sup>141</sup> There merit consideration, particularly in the establishment of administrative processes and in the design of dual control systems.

The Chinese/Confucianist tradition and the Islamic tradition clearly both favor cooperativist forms of business. In the case of China, the explosive growth in agricultural production in 1978-1984 as the result of policy is an example of the kind of results that can come of such programs.<sup>142</sup> This can be said to be true of Polish tradition as well, which is surely more family and culture-driven than is the norm among Western firms.

The second general form of capital is debt, arrangements where money is lent to an enterprise or venture to assist in carrying out the business in question. Ownership is not thus purchased, although there may be some equity also involved in related contracts. The dividing line between equity and debt

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141 Ellerman, D. P. 1990/1997. *The democratic corporation*, Chinese ed. [English edition: *The democratic firm*]. Beijing: Xinhua Publishing House; Ellerman, D. P. 1992. *Property and contract in economics: The case for economic democracy*. Cambridge, MA: Basil Blackwell, Inc.

142 Naughton, 2007, 121.

can be substantially blurred by contracts. It is even possible for an owner to lend money to his own enterprise. Debt acquired for business purposes is the standard way of doing corporatist business using “other peoples' money”. Such money costs money, typically a percentage interest charge while the money is outstanding. There may also be fees charged based on various rationale.

Lenders typically have no say in how the funds are used other than as stipulated by contract. For example, the funds may be acquired for a specific purpose, such as the purchase of equipment or raw materials for specific kinds of products to be produced. A lender would typically have a problem with business expenditures of an entirely different type than disclosed when requesting the funds, at least until a relationship was developed such that there was faith that the loan would be eventually paid back as arranged. Loans are typically corporatist or “arms-length” transactions that grant no favors. The idea of arms-length transactions is very corporatist – dispassionate, detached, perfunctory.

Of course, China is roundly criticized from outside for extending too much credit. This will be discussed later.

Debt typically does not meet Islamic requirements for two reasons. First, when lending money, you have even less authority over details over how the money is used than if you invest and receive a vote. As a lender, you have no direct responsibility – nor opportunity, to participate in the decisionmaking process of the enterprise. The problem is, Muslim law does not countenance the use of personal resources, including money, for purposes outside of the canon of Sharia law. There are comprehensive jurisprudential structures to determine what that law is under predictable conditions. Where conditions are not defined, there are ways of determining what can be done. Leaving this to change or vague promises is unacceptable, *haram*.

As outlined by Saleh and Ustaoglu:

The main Islamic principles that need to be applied to a contract may be classified into two: equity (fairness, social justice) and permissibility. In Islamic tradition the wealth one possesses is entrusted to the individual by the Creator, who is the foremost and ultimate owner of all things. One will be held accountable for how one's wealth is consumed or disposed of. Therefore, these two components must be incorporated into every ind of contract a Muslim enters into.<sup>143</sup>

Such being the case, if you are a practicing Muslim, you could not make the case that your money would be supporting appropriate outcomes under a corporatist model, given Sharia requirements. If a system of dual control existed, this problem may be mitigated by insisting that Sharia processes be

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143 Saleh, R., and Ustaoglu, M. 2014. The notions of Islamic economics and finance in the global era. In M. Ustaoglu and A. Incekara (Eds.), 2014, *Islamic finance alternatives for emerging economies: Empirical evidence from Turkey*. New York: Plagrave Macmillan, 38.

followed in every case. This would be feasible if the system in question supported Sharia requirements. Otherwise, arms-length security arrangement, particularly debt arrangements, look problematic.

The second problem with lending money is that Islamic law forbids the collection of interest on money. This is to say that money cannot be “commoditized” in this way. In some cases, there have been challenges to Muslims who have “lent” money without requiring interest, but gaining profits in some other way – through fees or other requirements. This arrangement is not contrary to profit, but a consistent conceptual framework for economic activity and equitable sharing of gain:

Looking at it from an economic perspective, the risk factor lies in the difference of interest, commerce, and profit. Commerce and initiatives involve risk; however, in theory, interest brings a fixed income. Interest indicates a predetermined fixed income; on the other hand, profit is not guaranteed and may change. It is not possible to project the profit considering the risk factor. Interest puts all the risks to the debtor. However, Islam encourages sharing the risk factor with your partner and in this manner profit differs from interest.

However, with interest, there is no entrepreneurship. The one who grants loans guarantees the receivables with no business or investment. In commerce, agriculture, and industrial activities, entrepreneurs spend their time and effort and contribute to the national welfare. However, debtors in interest-based business can access a big share with no investment in time or effort.<sup>144</sup>

There is wisdom here. Fluidity and dual control should provide improved groundings for investment decisions. This is particularly the case with regard to *Optimum Performance Living (OPL)* opportunities, which link knowledge and commerce. Common goals in Sharia law mirror in Islam beneficial objectives for all:

These goals are to preserve one's religion (*deen*), human life (*nafs*), the faculty of reasoning/intellect (*'aql*), progeny/offspring (*nasl*), and property/material wealth (*maal*). Any transaction that violates those rights is prohibited. Accordingly, exploitation is prohibited because it falls under the concept of *ghabn*. To protect these rights and ensure no party is exploited, risk-sharing via profit-and-loss sharing has to be a component of Sharia-compliant financing.<sup>145</sup>

Interestingly, there is a trend away from the use of securities generally in the East and in emerging economies, where family businesses who manage the work themselves are increasingly the norm.

McKinsey provides a bold projection that, by 2025, an impressive 40% of the world's large enterprises will be family or founder-controlled businesses from emerging markets. Studies have shown that family businesses in Asia tend to maintain stronger value, employee loyalty, entrepreneurship, and execution capability. This is mainly because in order to

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<sup>144</sup> Ibid., 36-37.

<sup>145</sup> Ibid., 38.

conduct and protect business transactions, private relationships are important in East Asian economies (as they are in other emerging markets). With the absence of fair and effective rule of law, it is risky to form new businesses with outsiders beyond the family circle. Instead, family businesses take shape with the father as CEO, mother as chief accountant, and children (who often do not even have formal contracts) in charge of key functional areas. This helps them avoid the risk of dealing with outsiders and reduce transaction costs, which contributed to creating the East Asian miracle.<sup>146</sup>

In Turkey, there is a good deal of innovation in the design of Islamic financial alternatives. One phenomenon is called participation banking:

A participation bank is a bank that shares the profits out of interest-based and commercial activities with its customers who provide interest-free funds.<sup>147</sup>

Such a structure may allow for participation in cooperativist enterprises with commitment to Sharia laws. As to any corporatist participation, support would be more of a problem. If such an organization were to be able to credibly commit to Sharia law, it isn't inconceivable. Participation banks are not fully acceptable to all Islamic scholars and finance experts.<sup>148</sup>

Several forms of partnership, *musharakah*, are effective within Islam. They involve different kinds of arrangements between parties, outlining acceptable joint ventures involving labor and capital. Profit-sharing partnerships, *mudarabah*, are widely acknowledged and accepted. Several structural options are available based on Islamic financial traditions.<sup>149</sup> Bonds, *sukuk*, and insurance, *takaful*, have also been designed and used within the Islamic financial community.<sup>150</sup>

Application of social principles and processes based on dual control and fluidity can apply to Confucian and other philosophies to be sure. It is important that this occur. It is important that this be done in a context of national policy and governance. Neither a cooperativist nor a corporatist environment is particularly effective when managing scientific knowledge in particular. This has shown to be the case on the historical reviews in Appendix A and Appendix B.

In a cooperativist program, there is a tendency for authority to grow out of familial or social relationships rather than knowledge, *per se*. Knowledge comes off as an abstract concept in fundamentally social environments. In a corporatist environment, participants have a tendency to try to gain leverage from their knowledge. They tend to hoard their knowledge until they can maximize its

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146 Park, S. H., Li, S. M., and Lien, Y. C. 2015, July 9. Who's in charge Of Asia's family businesses? Forbes Asia. Available online: <http://onforb.es/1CqZG3V>.

147 Ibid., 49.

148 Ibid., 48.

149 Ibid., 40.

150 Yildiz, B. 2014. Basic terminology in Islamic finance and Turkish perspective. In M. Ustaoglu and A. Incekara (Eds.), 2014, *Islamic finance alternatives for emerging economies: Empirical evidence from Turkey*. New York: Plagrove Macmillan, 59.



effect or bluff when they do not know a better way. For these reasons, a dual control environment is beneficial in both kinds of organization, making governance and management easier to carry out and providing better outcomes to customers and other stakeholders.

## Diaspora therapy

There is a famous, possibly apocryphal quote by Vladimir Lenin that the Czar's soldiers in the First World War were “voting with their feet” to go home and arguable quit the regime. Regardless of the provenance of the concept, it is of considerable importance to the tasks at hand with regard to governance and finance in China. These are global issues, as every society and culture has a diaspora of some kind. This is the case with Islam generally, also Poland. As societal and relationship bonds are strong, the health of diasporas often mirror the health of their host countries.

As to the Chinese diaspora currently, there are three telling factors that must be considered:

1. *The return rate of PhDs from the United States to the mainland is approximately ten percent.*<sup>151</sup> Better return rates exist for lower levels of education. Certainly the existence of competent Chinese scientists and educators around the world bodes well for the reputation of the Chinese people, but avoidance of the mainland is not a healthy societal condition. How can this be turned around? Coupled with efforts to encourage talent within China, this looks to be an important issue with substantial support. What can be done to support this effort?
2. *Capital flight from China is at an all-time high.*<sup>152</sup> Why would people want to export their money from the country? Why would they consider this to be a rational action? How could this be turned around? Are there not ways that the people could effectively deploy their capital in-country?
3. *There is a very problematic gambling trend within the Chinese diaspora, as well as evidence of underground gambling in China.*<sup>153</sup> As mentioned earlier, in-country stock markets are feeding this speculation trend. If the people are going to be dealing with risk, how can this urge be more effectively filled?

In all three cases, we can see signs of distress with regard to the Chinese community, among Chinese families in-country and within the diaspora. In the first case, knowledge exists within the Chinese community, initiated on the mainland, that is not likely to inure to the benefit of the country. In the second case, there are financial resources that could be of substantial benefit to China's development efforts. How is it that the people could see better opportunities in the country? In the third case, there

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151 Zweig, D. 2013, January 21. Luring back the Chinese who study abroad. *New York Times*, Opinion Pages. Available online: <http://www.nytimes.com/roomfordebate/2013/01/21/the-effects-of-chinas-push-for-education/luringback-the-chinese-who-study-abroad>.

152 Wildau, G. 2016, January 8. China steps up capital controls to stem outflows. *Financial Times*, Foreign Exchange. Available online: <https://next.ft.com/content/9e25a772-b5df-11e5-aad2-3e9865bc6644>.

153 Tse, S., Yu, C. H., Rossen, F., and Wang, C. W. 2010. Examination of Chinese gambling problems through a socio-historical-cultural perspective. *The Scientific World Journal*, 10, 1694-1704; Loo, J. M. Y., Raylu, N., and Oei, T. P. S. 2008. Gambling among the Chinese: A comprehensive review. *Clinical Psychology Review*, 28, 1152-1166.

are Chinese with money who see nothing better than to gamble it away or waste it on irrational investment. Of course, it can be said that they may win and many might. The gambling endeavor is zero sum to society at best and it does not lead to intelligent, useful, sustainable efforts or outcomes.

As to overseas Chinese, members of the diaspora outside of the mainland and otherwise, why would gambling appear to be on the rise? Investigation into twenty-five particular studies on Chinese gambling has shown that Chinese men are more likely to gamble, but likely to admit it less.

The common themes across the studies ... include males being at more risk of developing gambling problems, females experiencing worse outcomes from problem gambling, the inevitable detrimental effects of problem gambling on gamblers, and the high prevalence of gambling participation within Chinese communities.<sup>154</sup>

Considering such issues not only within China, but regard to the diaspora, may help in understanding how to resolve them and restore the Chinese civilization to more sustainable conditions. As economists direct China to “rebalance” its economy and markets to conditions that have never before existed, it would be well to understand how to “rebalance” China's culture, understanding how it has virtually always been. Of course, such a discussion needs to begin with Confucianism, which was brought to the center of Chinese life in the Earlier Han period, two centuries BCE.

If this is where the Chinese are coming from, where are they going to? Without attempting to associate the three problems mentioned earlier with other factors directly, we observe that the rich, meaningful family tradition of the Chinese may be a part of the cure. How to provide an environment in which, given other options, they will want to stay – especially the really smart ones? How to provide a business environment under which the last thing citizens would want to do is to get their money out of the country? How to encourage a cultural environment under which the last thing they would want to do is gamble their money away?

Perhaps the answer is *more* culture rather than less. The Chinese way of the future will surely not return to that of the past, but it could grow out of the past to provide direction and guidance to those whose thoughts, feelings, and memories are grounded in that most stable and longstanding of cultures.

We offer some ideas on how some such objectives might be addressed in an environment of improved governance and finance in China and elsewhere empowered by fluidity and dual control. Clarity in such matters should bring benefits with regard to policy in China as well as relationships with the Chinese diaspora around the world.

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154 Loo, J. M. Y., Raylu, N., and Oei, T. P. S. 2008. Gambling among the Chinese: A comprehensive review. *Clinical Psychology Review*, 28, 1157.

## Cooperativist wealth management

Kenneth Tingey, in a recent trip to Beijing, noticed a large, prominent wall-sized poster advertisement promoting the family wealth management services of a Chinese bank. The advertisement featured a good-looking, confident-looking young man seated in a comfortable armchair. The only thing missing from the picture was a family, but one was strongly implied. Assuming that is the case, is not such an arrangement exemplary of the economic and social goal for China from the perspective of governance and finance and their effects on the lifestyles and prospects of the people?

It could be said that the Chinese invented trade, if not capitalism. The Muslims may have opinions of their own and, clearly, accounting records for buying and selling of staples are among the oldest on record. Nonetheless, family and clan enterprise dates back to before cultivation, before there even there was a “rice bowl” to eat out of. How was this done? It is interesting to note that centuries of oppression did not mute the enthusiasm of the countless fathers who could always call on their “Mandates of Heaven” in their homes and fully exploit small opportunities. Confucianism's brilliance as a social philosophy was in the order of importance – first the mandarins, then the peasants, finally the artisans and merchants. Even when poor, the farmers were able to hold on to their pride.

Couched within the Heavenly Mandate of the Emperor, family leaders were always able to exercise their familial authority and position.

This was manifest in the order and harmony enjoined by the Confucian Classics – for example, the Five Relationships or Bonds that connected and subordinated subject to ruler, wife to husband, son to father, and younger to elder brother and related friend to friend; or the distinction between the superior men who labor with their minds and the small men who labor with their muscles; or the hierarchy of classes which ranked them in the order of scholar-official, farmer, artisan, and merchant.

Proper conduct in daily life, according to the classical teachings, would maintain this social order of status and hierarchy. Conduct was molded by the family system. The individual was at all times subordinate to his family, which encompassed all members within five generations, including even third cousins. This extended family system provided economic support, social contact and recreation, education, and a religious focus in the reverence solemnly paid to the ancestors. It bore legal and political responsibility for all its members. Moreover it functioned as part of the larger common descent group or clan, which might promote the welfare of families composing it. Within this ramified kinship and clan structure the individual was taught filial piety as the highest virtue. He found that kinship imposed strong obligations. As a result he was motivated by a “particularistic” ethic which committed him to meet the specific and particular demands of kinship rather than the more “universalistic” demands of legal regulations, religious principles, or market prices.<sup>155</sup>

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155 Fairbank, J. K., Reischauer, E. O., and Craig, A. M. 1965. *East Asia: The modern transformation*. Volume 2. Boston: Houghton Mifflin Company, 81-82.

This paternalistic structure probably does not translate fully to modern times, but it could serve as the basis for a family structure to meet the needs of the Chinese family into the future. The males probably fare better than the females as long as there is a plan. Young women, as indicated earlier, will surely need to be given opportunities that are not likely to come from the young men. This could be done commercially and communally, as outlined in the “Rancho Bernardo/capitalist commune” section later. Similarly, assistance could be provided to wives and mothers as to modern lifestyle adjustments, given Confucian groundings. It is a simple fact that men are not going to accomplish this on their own, or even know how.

### **Channeling the Chinese obsession with opportunity**

Put back on his pedestal, Chinese husbands and fathers will be better able to put games in their place. Speaking of games, upon reflection, the wisdom of establishing domestic stock markets in an environment of mostly state-owned firms may be counter-productive. Jiang Zemin may have had it right, capital market activity may trigger challenging behavior with regard to risk-related behavior – wagering, and even gambling-like conduct rather than rational business risk-taking.

Throughout their history the Chinese have been extremely fond of games and sports, and their weakness for gambling (dubo) has been an anathema to Chinese moralists as well as successive governments from ancient times to the present.<sup>156</sup>

The tendency seems to have come out into the open by means of contact with the West, but references to problems with gambling date to the Shang and Xia Dynasties, to as early as 2000 BCE.<sup>157</sup> Gambling problems were documented from the Emperor on down. Encouraging wagering of this kind in a meaningful way, that impacts on China's fundamental economic prospects, is probably not helpful. Consumer “stock trading halls” are described as...

...almost like a casino. The way people invest, they don't really look at fundamentals, they don't look at the numbers. They come and meet friends and chat.

One participant said,

Buying lottery tickets and buying stocks are pretty much the same thing. But the stock market is more interesting.<sup>158</sup>

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156 Prunner, G. 1982/1991. Games and sports: Traditional games and sports. In B. Hook and D. Twitchett (Eds.) *The Cambridge encyclopedia of China*. Cambridge, UK: Cambridge University Press, 132.

157 Tse, S., Yu, C. H., Ressen, F., and Wang, C. W. 2010. Examination of Chinese gambling problems through a social-historical-cultural perspective. *The Scientific World Journal*, 2010(10), 1698.

158 Chen, T. P. 2016, February 15. Irrational exuberance takes hold at China's stock-trading halls. *The Wall Street Journal*. Available online: <http://www.wsj.com/articles/irrational-exuberance-takes-hold-at-chinas-stock-trading-halls-1455574057>.

From a policy standpoint, capital assets could be more favorably channeled to meet the business needs of families and cooperative ventures that support fundamental societal purposes, as prevailed throughout the histories covered in Part I. Even for private firms, attempting to raise capital in supposed market structures may not be the best way. There is the problem of separation of capital from productive activity. This is probably the most fundamental aspect of Islamic finance, that it is conceivable in that frame of reference to separate financial resources from management of related outcomes.

There are two sides to the issue. First, family businesses may benefit from the capital in question. In a cooperatist environment, a family-oriented situation, there are likely to be preferable ways of obtaining capital than from strangers, where there is no relationship other than the investment itself. Better alternative may include extended family members or partnerships with central or local governments where there are mutual interests, or their proxies.

Second, people may have money that they would like to invest. In this, they face a question as to whether they should give the money to someone else in their circle of relatives and friends as opposed to saving it or investing it elsewhere, essentially with strangers. There would be advantages to giving funds to relatives as opposed to strangers. Family enterprises may offer opportunities, as well. Family-centered approaches, we believe, have shown to be more sustainable and successful in the long-term in China and elsewhere than businesses with no familial ties or other social connections.

Government policy could encourage these, which could help tip things in the direction of cooperatist enterprise generally. If there must be risks, let them be the kinds of risks that bring significant, ongoing, and viable rewards, such as can be the case with enterprise. The Chinese have gained a reputation for inventiveness and innovation in spite of centuries of repression in this regard. As to the traditional society:

Chinese ingenuity and inventiveness, which have provided so many of the amenities of life, such as silk, tea, porcelain, paper, and printing, would no doubt have continued to enrich China and would probably have brought it to the threshold of the industrial age, if they had not been stifled by state control. It was the state that killed technological invention in China. Not only in the sense that it crushed *ab ovo* anything that went against or gave the appearance of going against its own interests, but also because of the customary attitudes so firmly implanted for reasons of state. An atmosphere of routine, traditionalism, and immobility, in which any innovation or initiative not demanded and sanctioned in advance is regarded with suspicion, hardly conduces to the spirit of free research.<sup>159</sup>

The goal of the traditional state was wealth and power (*fuqiang*) along with the well-being of the population.<sup>160</sup> Questions to be considered in an environment of dual control and fluidity is if the rules of

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<sup>159</sup> Balazs, 11.

<sup>160</sup> Schram, 229.

the game can be managed such that prosperity can be achieved without concurrent risks of corruption and environmental deterioration. As mentioned elsewhere, neither a corporatist nor a cooperatist approach is particularly knowledge-friendly. Guiding entrepreneurs by the hand in both authoritative and knowledge-based actions may well provide for the prosperity that all are seeking without the negative fallout that everyone fears.

## **Cooperative, “post-zombie” enterprises**

The legitimacy of enterprises is of two parts, socio-political legitimacy and cognitive legitimacy. This means that the organizations are generally-recognized and accepted in the first place and that they do what they are expected to do in the second place. Methods-based management operationalizes these two concepts with the concepts of immersion and fluidity. Immersion relates to acceptance in relevant communities, including technology-based networks. Fluidity relates to knowledge and authority and their use to get done what is expected of the organization. “Zombie” enterprises are nominally alive, but without valid purpose. They may be found to enjoy immersion, but not fluidity; socio-political legitimacy but not cognitive legitimacy.

It is also possible that they are simply “out of gas”. They may have pieces of both legitimacy constructs, but little vitality. There is more than a little of this in the world economy.<sup>161</sup> This may be a problem associated with their form of organization and relationships with their stakeholders, be they managers, workers and other employees, customers, investors, partners, etc. In some cases, this could be resolved by converting from a corporatist to a cooperativist framework. Perhaps participants would benefit from having a bigger stake, a higher proportion of ownership. Perhaps they would respond to an opportunity of a different kind, a legal and financial structure that would encourage family and community collaboration in particular.

Family business is on the rise throughout the world. McKinsey & Co. projects that of the 7,000 significant new enterprises to be founded in emerging markets to 2025, eighty percent will be family enterprises.<sup>162</sup> Perhaps some of the zombie companies of concern to China might be resuscitated and reinvigorated by families.<sup>163</sup>

## **Adjudicating democracy with networks of trust**

The modern approach to political economics, the liberal market view, has been to depend on the law of large numbers to consider such questions. This constitutes an expression of faith that might even shock the religionists. The assumption is thus: People acting in their own narrow self interests, if doing so in

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161 Leaders editor. 2016, February 20. Out of ammo? *The Economist*, 418(8977), 9.

162 Elstrodt, H. P., and Pouillet, J. M. 2014, October. Introduction. In Javetski, B., Cait Murphy, C., and Staples, M. 2014, October. New York: McKinsey & Co., 4.

163 Wei, L. L. 2016, February 20. China tries to win over economic skeptics. *The Wall Street Journal*, A6. Available online: <http://www.wsj.com/articles/china-moves-to-dispel-doubts-on-economy-1455905408?tesla=y>.

large enough numbers, will unconsciously and inadvertently carry out optimized outcomes. This includes optimal pricing, as well as allocation, production, sourcing, and logistics. Prices and costs will, it is believed, adjudicate all such matters. Furthermore, guided by leaders with no documented knowledge of or concern for any other social, economic, or environmental factors, the organizations in question will “do the right thing” in this regard.

## International concerns for Chinese finance and governance

It is impossible to pick up a newspaper or magazine that does not feature advice for China. *Table 2: Documented international concerns with Chinese finance and economic management* contains some of these. There are many issues with regard to economics and finance that would exist regardless of governance and finance issues employed in each case. Economic activity carries with it fundamental value propositions along with situational risks. Liberal trade proponents emphasize the situational factors, with little attention being drawn to the intrinsic value of what is being provided.

As can be seen in *Table 2*, a number of concerns as to China's economy have been published. Major factors relating most specifically to finance and governance are listed. This is not intended to be a comprehensive listing of concerns, but limited commentary on issues in each area with regard to fluidity and dual control.

Table 2: Documented international concerns with Chinese finance and economic management			
Concern <sup>164</sup>	Corporatist issues	Cooperatist issues	Dual control issues
Lack of credible economic data	Neither the corporatist model nor the cooperatist model is effective with regard to credible economic data. Corporatists tend to have internal information silos and cooperatists hoard information as a clan – or they may not have knowledge within the family. The temptation to use information as a competitive tool is typically too great for both types of organization. Enterprises of both types, as well as the economy itself, are best served with a standardized system for managing data that can only be controlled and managed via processes. Enterprises would be able to control organizational processes, but not those that reflected accounting standards or regulatory requirements.		Establishment high volume, independent data collection observatories regarding physical, biological, and social phenomena would serve as a strong foundation for process-oriented models. Furthermore, making use of a common ledge of all things encrypted, <i>only accessible by means of authorized processes</i> , substantially enhances both data and process.

<sup>164</sup> These are from a variety of sources, including duplication. These include: Naughton, 2007; Paulson, 2015; Eichengreen, B., and Kawai, M. (Eds.) 2015. *Reminbi internationalization: Achievements, prospects, and challenges*. Tokyo/Washington DC: Asian Development Bank Institute/Brookings Institution Press; OECD Global Relations Secretariat. 2015, March. *Active with the Peoples Republic of China*. Paris, France: OECD.

**Table 2: Documented international concerns with Chinese finance and economic management**

Concern	Corporatist issues	Cooperatist issues	Dual control issues
High stock market volatility	The corporatist model supports the hoarding of data, resulting in much speculation and decisionmaking based on purposefully incorrect data; by pretending to represent market conditions, financial markets force the misapplication of knowledge – knowledge exists, but is not used due to pretended market conditions.	The cooperatist approach calls into the question the need for “arms-length” equity instruments; the anonymity of such arrangements is problematic with regard to Islamic finance, unless possible commitment to Sharia law through dual control is found to be acceptable; there is likely a Confucian corollary to this.	There may well be better ways of obtaining capital for Chinese companies, particularly cooperative enterprises. This could be through private equity and profit-sharing partnerships rather than publicly-exposed transactions; the same is likely true of government-owned enterprises.
High currency volatility	Separate management of the currency is clearly a corporatist function. Coupled with an open stock market environment that is subject to world financial flows that have nothing to do with China's fundamental economic and trade activity not only creates volatility, but makes China subject to global volatility.	This needs to be taken into account with regard to diaspora requirements and the desire for a global currency. This should be considered in light of Confucian and Islamic traditions and requirements, as they comprise half of the world population between them.	It is not wise to “take the bait” and follow the monetarist temptation to treat capital separate from underlying economic and trade requirements. Among other things, linking capital to trade should substantially reduce currency volatility.
Artificially stimulated economic growth	Fewer corporatist and more cooperatist development programs are warranted; less debt and more cooperative partnership business arrangements would provide a stronger foundation for planning and development; reviewing existing “zombie” companies and stimulating joint development activities using cooperativist models should be an effectively way of stimulating growth.		Dual control would make prerogative more difficult to achieve, as economic statistics could be derived directly from transactions available on the blockchain universal ledger.
Investment ahead of demand	Prospective corporatist arrangements are likely to be more speculative than cooperativist programs and possibly less subject to the opinions and desires of the group.	Cooperativist programs are likely to be more aware of social elements and will likely be closer to social sources of demand; investments ahead of demand may more likely be used later.	Fluidity and dual control should provide improved groundings for investment decisions. This is particularly the case with regard to Optimum Performance Living (OPL) opportunities.
Manipulation of all markets	Governments would be better suited to provide requisite data and information as a public service and as a part of the basic economic system. Based on the combination of expert-driven and authoritative processes, establish “pivot points” where competitive, market-based activity can take place. In those contexts, allow for open competition and market maneuvering.		Provide models and technologies for independently-verifiable data collection observatories and fluidity in system development, allowing for dual control in administrative, finance, and science-based processes.



Table 2: Documented international concerns with Chinese finance and economic management

Concern	Corporatist issues	Cooperatist issues	Dual control issues
High levels of indebtedness	This is a problem in that the demand might not materialize or plans did not really hit the mark. It would be interesting to have existing projects looked at from a cooperatist frame of reference by collaborative groups or families.	What would possibly be an indebtedness issue in a corporatist framework would be a governance issue in a cooperatist mode, where there is more collaboration and negotiation in the planning and management processes.	An initiative to review existing companies as to their prospects and capital structures could identify opportunities to convert “zombie” enterprises to viable concerns; this could involve a review of cooperatist capital and operational models, as current managers may be able to gain improved performance with cooperatist structures and support from dual control and fluidity.
Politically-driven policy, unclear policy	This is a criticism that is largely tied to monetarist economic policymaking. With the inception of monetarist policymaking in the United States in 1981, inflation was conquered, but price controls were instituted, which now affect all nations. The key factor is in the disassociation of finance from trade. China's policy to require documentation as to how currency exchange is tied to trade is an important policy. If the <i>renminbi</i> is more closely associated with trade, it will have increased relevance as a global currency. It will also more closely correspond with Islamic requirements, which will have important implications with regard to trade within the “Triangle of Trust.” It would be beneficial, as well. Is the object to follow along with the mandates of the global financial regime without question? No. Is the object to establish a strong cooperatist model in which currency meets the needs of primary markets and society? Yes.		Technology is an important factor along with the availability of credible data. Improvement of accountability is in order. Monetary questions should be driven from fundamental economic activities, between capacity and cooperation. A detached financial regime encourages imbalances, particularly those related to financial engineering, is the underlying problem. The question isn't better information for purposes of monetary controls, it is in subjecting currency to the requirements and flows of trade.

Considering complaints as to governance and finance issues without considering implications with regard to corporatist and cooperatist models would be counterproductive. As indicated throughout, the object is to evaluate China's prospects with regard to historic principles and findings which resulted in long-term stability rather than try to duplicate or copy Western models and traditions that have shown to be unstable over even short time frames.

## PCISKM reforms for China

Appendix A and Appendix B provide background information for understanding the longevity and the sustainability of socio-political regimes, not only in China and the Middle East, but in the West as well. *Table 3: Current finance & governance issues for China* demonstrates different sets of conditions with their implications with regard to the PCISKM model. These show a progression of policies leading to a more participative governance model. Of course, many issues come together to form an effective governance model and there may be alternative courses that will bring desirable results.

Table 3: Current finance & governance issues for China

Time	Issues	Governance	Private life	Influence
Pre-1979	Reestablish Chinese sovereignty	Create governance models to combine Chinese culture with	Agrarian social restructuring; modernization following Soviet model, then independence; radical development experimentation; subsequent radical social restructuring	PCISKM
Reform to 1989	Access to Western markets and finance	Opening to West; allowance of private initiatives; opening for some foreign direct investment	Effective response to personal and family incentives; access to foreign markets and finance; opening to foreign manufacturers	PCISKM
1990s to 2007	Maximize success of Chinese enterprises	Establish institutional market forms; innovative corporatist governance models; opening of state enterprises to capital markets	More energetic government-owned corporate restructuring; more intensive financial restructuring according to Western models; public/private/finance joint ventures; historic levels of urbanization	PCISKM
2007 to current	Adapt to internal and international financial risks	Adaptation to faulty global core-periphery model	Some urban retrenchment to the countryside from effects of Great Recession; re-establishment of growth and growth of global influence, but with high volatility in currency and capital markets	P ISKM
Current/prospective	Establish economic leadership	Embrace traditional cooperativist models; combine	Improvement of family/clan lifestyle; repairing diaspora social or economic issues	PCISKM

The main factors are to encourage more cooperativist models, which may or may not involve family relationships. The “C” principally relates to “clan” but is similarly appropriate with respect to “cooperativist” model. The “I” may similarly connote a corporatist institutional approach. Following are several commentaries on how such objectives may be reached.

## Capitalist communal models

A 1983 publication titled “*America II: The book that captures Americans in the act of creating the future*” has a most interesting chapter called “The Rise of Capitalist Communes”.<sup>165</sup> This is an interesting development, long in the making. It is an example of the kind of pragmatism that is likely to serve China's interests. It is an example of effective means of bringing together public and private initiatives in ways that meet the desires and needs of the people.

With its mix of condominiums, townhouses, and single-family homes, and its self-governing sub-societies, Rancho Bernardo is one of the birthplaces of the common-interest community. Its physical design as well as its form of private government is being emulated all over the country, mainly in smaller developments.

165 Louv, R. 1983. *America ii: The book that captures Americans in the act of creating the future*. New York: Viking Penguin, Inc., 92-107.

[The commercial developer] turned the job of enforcing the community's strict architectural guidelines over to a handful of community associations (minigovernments), which added a few rules of their own.<sup>166</sup>

There are many of them, highly detailed and closely managed. This is in America, "the land of the free and the home of the brave."

To outsiders, these rules are remarkable, but for many people who live here, the rules are invisible. Rules set up to enforce a lifestyle magically disappear when everyone agrees that the lifestyle is the way to live. Consider Earl Engle. Engle, seventy-seven, has lived in Seven Oaks, a Rancho Bernardo village, for eighteen years. "I can plant anything I want to," he explained. "Sure, they have some rules, like the one that regulates campers. But the community associations are here to protect our interests, not let the community deteriorate. That's not regulation; it's common sense. I don't know why anyone would look at it differently than I do, do you? He was incredulous that anyone would find all of this a bit strange.

All the rules are just fine with Larry and Kathryn Reischman, who, with their two children, recently moved to a Rancho Bernardo village that allows children. "We're not really involved. Both of us work," said Larry, sitting beside a pool in a village called Eastview. "But I don't think there's a lack of freedom. We don't have to worry about yard work. That's a real relief. And we like the security. We have a block watch – everybody reports suspicious vehicles. Every forty-five minutes Rancho Bernardo's security patrol drives by. I'd say security was the most important reason we moved here; it's more psychological than anything."<sup>167</sup>

What makes people want to live in certain locations and under what conditions is knowable. Not only a benefit in promoting cooperative economic activities in general, such knowledge can be translated into programs to resolve the urbanization challenge and address diaspora issues.

## **Emphasis on clans and cooperation**

The corporatist model has taken its toll on the global economy. Perhaps it has supported finance, narrowly defined, but perhaps it has not. A cooperativist approach is warranted for China for several reasons. It is an important means of achieving social cohesion. Cooperation is compatible with the Confucian tradition. A cooperativist approach has shown to be supportive of stable social relations over time. As indicated by McKinsey & Co., family-oriented business development is a major development worldwide, particularly in emerging economies, particularly in Asia. Many of these will be Chinese regardless; policies in support of such activities will be beneficial within China and throughout the diaspora. The Danish Knowledge Centre for Agriculture (VFL) and its guidance in ownership, funding,

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<sup>166</sup> Ibid., 93.

<sup>167</sup> Ibid., 94-95

and decision-making is a good example of the possibilities for such a function in public-private partnership.<sup>168</sup>

## **Knowledge/dual control process infrastructure**

The corporatist model has taken its toll on the global economy. Perhaps it has supported finance, narrowly defined, but perhaps it has not. The question of “seeking truth from facts” has not been adequately address, particularly due to the inflexibility of widely-used information technology models. The Silicon Valley development model is particularly damaging to knowledge-centered approaches. A dual control infrastructure will allow Chinese parties to leverage their knowledge in all fields, giving them an advantage in the documentation of process-related opportunities. This will allow them to be used domestically and internationally. It will also provide an advantage to Chinese individuals and institutions in their respective fields of study and practice.

## **Taming technology**

Innovations that have been “lying on the shelf” need to be enthusiastically embraced. New innovations need to be established based on resulting models, also put into use. Castells was right about the power of networks. He provided eloquent descriptions of how networks have transformative power in all aspects of society and associated political and economic activity. He is far too optimistic as to how that power is to be harnessed. By designing systems with only a modicum of knowledge, technologists have done great harm. Unchecked, their systems create faulty products, incorrect diagnoses, misleading market information, and wasteful misuse of resources.

The “four modernizations” date back to times when the West represented a glowing “house on a hill” that represented wealth and power, also the summit of rationality. At that time, it looked like all markets would balance themselves, all policies would bring desired results, and all knowledge would be available for the general good. Now it can be seen that this is not the case. The fourth couplet “science & technology” involves a complex set of affairs and conditions that will take much effort, good fortune, and risky political strategy in order to realized desired goals. The inability to “get to the science,” technology being the barrier, seriously compromises China's efforts at achieving economic stability, along with growth that will extend to the well-being of the people and the social underpinnings of the state.

As can be seen, China is not alone in this precarious state. The brittleness of technology – its gross misuse with regard to science, knowledge, and effective policy – is pervasive, worse even in the economic core, where systems are all the more inflexible, with much more in sunk costs and infrastructure. The questions addressed here include: (1) the need to establish more cooperative

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168 Chipeta, S. 2015. *Innovations in financing mechanisms for demand-driven agricultural advisory services: Evolution of the Danish Model*. Rome: Food and Agriculture Organization of the United Nations, 14-19.

approaches and institutions; (2) the need to support social as well as scientific requirements with more precision; and (3) the need to encourage a plethora of power and control mechanisms by means of existing networks and process-based democracy provide a seedbed for collaboration. We encourage this as an important aspect of a Beijing-Warsaw-Abu Dhabi consensus, also for cooperative work with countries around the world, particularly in emerging and poor regions.

## **Specific innovations for China**

Given limited time and enormous scale, China needs to focus its efforts. We offer four suggestions as to priorities.

### **1. Cooperative ethnic/clan/family development models**

By establishing development models to meet the social and political needs of China, an infrastructure to meet similar needs in Poland and the Middle East is automatically created. This being the case, straightforward projects can follow, designed to meet the specific needs of ethnic populations, of which there are approximately one hundred, or unique countries, of which there are about twice that many.

As outlined earlier, family relationships are changing. Nonetheless, this social structure, the most fundamental of all, is of enduring importance. As to economic development questions, the family unit is of critical importance. Of course, relationships between families and states can prove challenging, China's history being one example of many. Can China deal with the many mini-dynasties that may thus surface? Surely this is a process that is well-under-way. One important question is in establishing policy that will encourage the growth and prosperity of family-owned business *per se*. Perhaps there are better ways of ensuring permanent, productive capital for Chinese family businesses than stock markets fully open to the “ups and downs” of the global string of stock markets. Perhaps the legitimacy and prospects of government-owned enterprises – some of them considered “zombie enterprises” for one reason or another – could be enhanced by entering into profit and loss-sharing partnerships.

According to McKinsey & Co., approximately six million significant family-owned businesses will have formed by 2025, many of these in Asia. Supporting the needs of such family businesses may well shore up China's capital markets and provide for more stability viz-a-viz current arrangements.

### **2. Permanent productive capital**

It is important delineate the nature of the development model, its objectives and characteristics, before more effort is directed at finance and governance systems. Islamic tradition provides an important example of possibilities for process-centered activity. By establishing an enterprise capital model tied to Confucian traditions, it would be possible to provide more stability, to encourage a more cooperatist approach to business activities. Partnering with the Emirates and Islamic institutions, parallel processes for both traditions could support productive capital requirements that would leverage these traditions.

This could extend to additional marketing activities in finance in the regions in question and in neighboring countries that would benefit from higher levels of accountability and compliance with ethnic norms.

By leveraging technology – utilizing fluidity and dual control – such kinds of requirements may be employed without having to organize specialized boards of directors or supervisory boards. Subdivisions could be introduced – original Confucianism vs Liang QiChao versions or Sunni vs Shia versions. Such issues could be incorporated within negotiations regarding the State-Owned Enterprise Sector (SASAC). They could also be integrated into wealth management and family planning activities.

### **3. Leadership in consultation, data, and process**

China has always led out in government consultation. Witness the organization of the Chinese Peoples Political Consultative Conference in the principal organizing meeting of the Peoples Republic of China in 1949. The Organic Law is based on this fundamental element of China's political democratic model. While such consultation is largely political and social, it also emphasizes collaborative efforts in science and technology. China's tradition in this activity is of inestimable importance in the establishment of dual control traditions everywhere.

Acquisition and use of data is “coming at us” whether we want it or not. Much of this comes as a result of efforts of technologists to expand on their social media options. This comes in the form of health-related applications and devices, weather reporting capabilities, analysis of data provided directly to information technology companies or generated by them based on their analysis of such data.

Without the introduction of fluidity, system design by experts and authorities themselves, such data is certain to be misinterpreted, misunderstood, and misused. The more data such organizations have access to, to make use of, the more misleading, wasteful, and costly such interpretations will be. This is a phenomenon that is very costly to China now. With time, waste and misinformation will only grow.

If China is in the lead in resolving the problem – and in the development of all aspects of bring that about – the stronger position China will be in, both domestically and in the international arena. Representatives of the status quo, mostly commercial enterprises in information technology and system development, will not give up easily. The good news is that these are mostly Western enterprises – the providers of Internet-based systems, desktop hardware and software, etc. This can serve as an advantage to China, as there will be less domestic resistance in such an effort. Investments and development programs will be that much easier to successfully put forward.

### **4. Participation in open source programs**

Open source software initiatives are a modern miracle of cooperation. Having functioned for decades, they provide the best enterprise-quality software available. It would be beneficial for China to

participate in these programs to support their success, also to learn effective technological management on a cooperative environment from them. Also, the excellent open source software would be more accessible in that way.

## Government finance infrastructure under dual control

Government finance entails financial responsibilities of governments as institutions, provision and oversight of currency, and oversight and regulation of capital markets. Institution requirements include administration of fiscal policies and other preferences and requirements of the country's political and social preferences.

## Cardinal Web 4.0 presumptions

The financial system is a subset of the economic system, which is a subset of the social system. The Internet, although commonplace in most parts of the world, When users can take over the Internet, it will become of much greater use to society. This is particularly true of expressive knowledge forms, the ability to design complex, integrated processes. As can be seen in *Figure 5: Web 4.0 concepts leading to Finance 4.0*, community sovereignty is an important objective, one that has yet to exist. This is to say that communities that matter do not yet have the capability of leveraging their knowledge, their expertise, and their potential for social contribution.

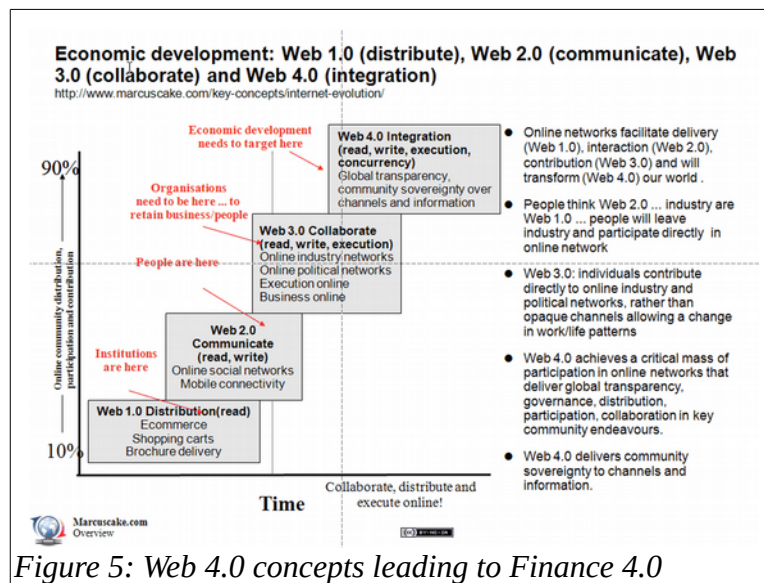


Figure 5: Web 4.0 concepts leading to Finance 4.0

Dual control is a potential result from this kind of empowerment, the combination the empowerment of experts as well as authorities. Many of these are outlined with regard to governance and finance at a national level. These naturally extend to similar opportunities globally, a particularly important development with the effects of globalization, largely the result of widespread use of technology.

## Core financial system requirements

Government governance systems requirements of the United States are referenced due to available documentation.<sup>169</sup> Such requirements are likely to be representative of those of China and other large nations, but there are surely to be significant differences. Where these are obvious to us, we will provide commentary. Otherwise, we will attempt to present implications of dual control and fluidity with regard to governance and finance at the national level.

In an environment of dual control and fluidity characterized by “Big E, little e” information models, more definitive management of policy would be possible. *Figure 6: Elements of conclusive financial model* provides a visual representation of the nature of such a system. Such a model is designed to support a reconciliation of the artificial, man-made economy with the economy of nature as seen in *Figure 4: Demiology relationships*. The point is to leverage the symbiotic relationship between data and processes that infuses all phenomena, whether natural or synthetic. Gathering data and ensuring the existence of a system in support of process development and use is a key government function.

Such a structure can be seen as a function on par with the development of the Internet, not altogether dissimilar to that highly successful endeavor. The Internet could never have come to be as the result of private initiative, as private enterprises have ulterior motives, or at least different incentive structures.

Prior to the Internet, most information processing companies offered online services, but they were all skewed in directions that supported their corporate objectives, which had long been established. The same phenomenon can be seen in companies that have grown up out of the Internet. They, too, provide stilted products that support their unique objectives without a public mandate. Witness the current debate between Tim Cook, the head of Apple Computer, and the US Federal Bureau of Investigations.<sup>170</sup> Imagine getting lectures about integrity and responsibility from a company known for both crass replication of the technologies of others, as in their commercialization of the desktop metaphor developed at Xerox – the famous “Apple daylight raid”,<sup>171</sup> and extending its intellectual property rights to patents on commonalities such as “rectangles with round corners.”<sup>172</sup>

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169 General Accounting Office. 2005. *Core financial system requirements checklist for reviewing systems under the Federal Financial Management Improvement Act*, 05-225G. Washington, DC: Author; Joint Financial Management Improvement Program. 2001. *Core financial system requirements*. Washington, DC: Author.

170 Winkler, M. 2016, February 23. Tim Cook and Apple are fighting the FBI (and for your rights). *The Alternative Daily*. Available online: <http://www.thealternativedaily.com/apple-are-fighting-for-your-rights/>.

171 Waldrop, M. M. 2001. *The dream machine: J. C. R. Licklider and the revolutions that made computing personal*. New York: Penguin Books, 441.

172 Macari, M. 2012, November 7. Apple finally gets its patent on a rectangle with rounded corners. *The Verge*. Available online: <http://www.theverge.com/2012/11/7/3614506/apple-patents-rectangle-with-rounded-corners>.



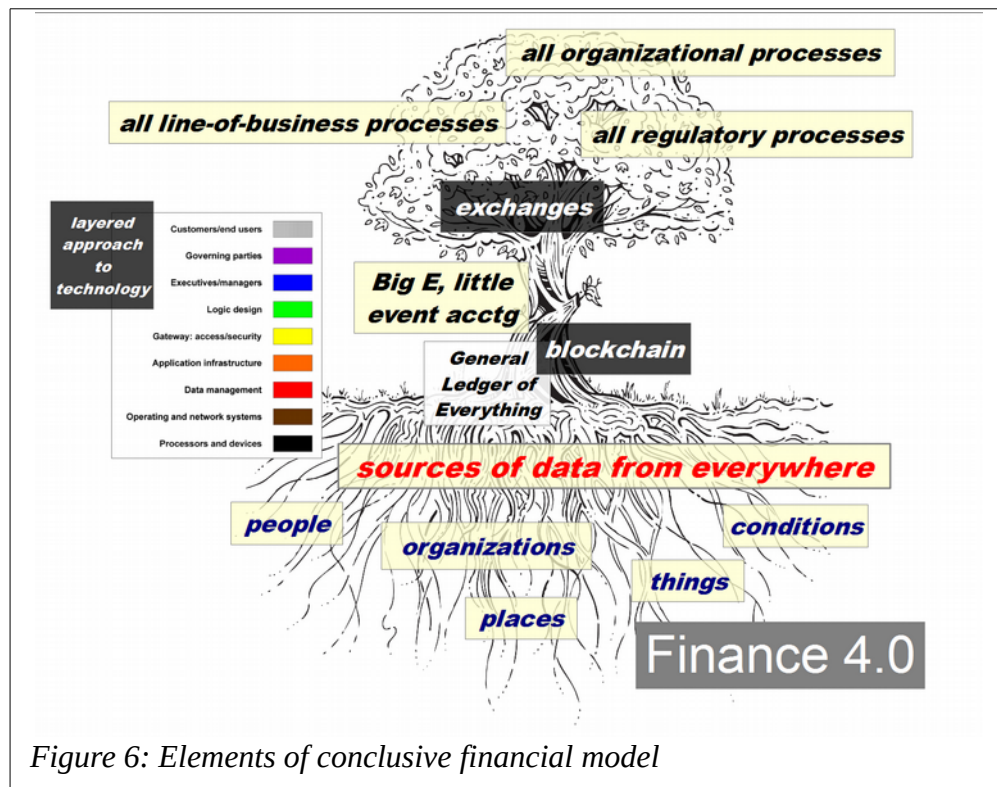


Figure 6: Elements of conclusive financial model

Key moments in the development of the Internet – indeed in the development of interactive computing – demonstrate this problem. The research team at the Department of Defense's famous *Advanced Research Project Agency (ARPA)* had decided in 1964 to contract with IBM to develop their first system, to the loss of the “seven dwarf” companies that did not get the contract. The ARPS people liked one prototype that had an important feature:

...[it] did have one great thing going for it. [Fernando] Corbató [the designer] had designed it as an open system, in the sense that users could modify it tailor it, and extend it however they wanted. As Corbató himself said, “This open system quality ... allowed everyone to make the system be their thing, rather than what somebody imposed on them.”<sup>173</sup>

Actually, the prototype had other things going for it as well, including passwords and controlled access, with the technologists despised but the users relied on.<sup>174</sup> Such themes should sound familiar as to the concepts of fluidity and dual control. Soon it was learned, with initial relief on the part of the ARPA sponsors, that IBM was developing a new integrated environment, a family of computers that would meet all of their client's needs – named 360 for its ability to “cover the whole circle.” After signing IBM's nondisclosure agreements and “taking a solemn oath of silence,” the ARPA people were let into

<sup>173</sup> Waldrop, 231.

<sup>174</sup> Ibid., 235.

the IBM “star chamber.” There were pluses and minuses as to the IBM plans, but one factor was clearly a problem:

All through their design both in hardware and in programming, [the IBM engineers] seem to have taken the view that a system is a static thing which is only created once and never modified...

“We were stupefied,” said Corbató, “because it was apparent that we were watching a locomotive speeding down the tracks. Nothing we could say or do would cause them to deviate from what they were doing. They had too much at stake. They were not able to change [System/360], or were unwilling to change it. And to some extent they didn't believe that what we were trying to do mattered that much anyway.”<sup>175</sup>

As a result, the government ended the association and followed another path, which resulted in the Internet, as well as other “open” solutions. Thus we can see the problem faced by governments. Similar to the objectives of ARPA in 1964, they are to provide a *palette*, an environment on which all of the knowledge in question as pertaining to governance and finance must function. This is a complex dance of data and process. There is no way to minimize the task – we are talking about *all knowledge*, even what we do not yet know. The arbitrary gaps between the economy of nature and the artificial economy of society are as comprehensive as can be. The solution must be equally comprehensive.

The conceptual breakthrough that makes this possible is a basic element of fluidity, the addition of *expressive* knowledge forms – easily-designed computerized processes – that can function along with tacit and expressive forms of knowledge, which are more common, and the many streams of data that are coming into existence one way or another.<sup>176</sup> It is interesting to note that in spite of success with the Internet and other important projects, the goal ARPA outlined in 1964 of user-defined systems is yet to be achieved generally.

Figure 6 provides a visual representation of the objective, Finance 4.0, where governance and finance function in desired ways, mastering technology rather than being enslaved by it. Data streams are brought up from the roots, from their natural and organics states, standardized and combined in a unified form as per event accounting principles and permanently registered as per blockchain concepts in an encrypted universal ledger, to which access can only be achieved by means of authorized processes. The branches of the tree represent the kinds of process that need to be designed. These must be in a constant cycle of use and adaptation to meet the needs of the people as represented by process types, regulatory, organizational, and line of business – which represents the processes by which the organization fulfills its mission.

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<sup>175</sup> Ibid., 247.

<sup>176</sup> Tingey, K. B. 2009. Chapter five: Fluidity and the missing information processing model. In K. B. Tingey, *Methods-based management*. San Diego, CA: University Readers, 73-102.

The colored, “layered” approach to technology is a critical key to the success of the program. The layers to the top, from green to blue, purple, and checkered black-and-white represent fluidity, the means by which the organization – or networks of organizations in the case of the governance/finance system – gets done what it exists to do, what the people expect it to do. The layers to the bottom, from yellow to orange, red, brown, and black, represent specific, critical tasks to be performed by technicians. These will need to stick to such tasks in support of what goes on above. They will not be able to dictate anything to them, nor engage in governance and management dialogs. Jumping layers by technicians is not to be allowed. Some vertical layers overlap may occur in the higher layers, between purple governance activities and blue management activities. Possibly, overlap between blue management participation and green logic design will be warranted. Functionality will this be improved. External security will be enhanced through internal security.

### ***Event accounting basics***

The first dozen or so event accounting papers were very insightful and helpful in understanding the prospects for improved data structures for organizations. There was some good work from that time forth, but most publications under the event accounting label did not support the principles laid out from the beginning. A 1989 article by Barry Cushing makes the case for accountants serving in a role as arbiter of processes of all kinds, not just straight accounting.<sup>177</sup> One approach to administering event accounting out eas the idea of a “business solutions professional” to carry out such tasks.<sup>178</sup>

Supporting event accounting objectives systematically based on dual control and fluidity would involve a very different role than that which was stimulated by Sarbanes Oxley in the United States as a result of the “dot com” stock market crash of 2000. The point of Sarbanes-Oxley was that CEOs and CFOs of publicly-held companies were required to certify that that “internal controls and procedures” supporting their financial statements had been reviewed within 90 days and any problems found had been fixed. This certification, if found to be unfounded, carries criminal penalties.<sup>179</sup>

The net result, as communicated by many accounting professionals, was the widespread hiring of accountants with the sole purpose of making sure that nothing “risky” was carried out. Such an approach does not support the critical needs of fluidity, nor of dual control. It would rather have a chilling effect on any kind of knowledge application. The accountants in question would not have any systematic means of gaining the knowledge in question to make effective judgments, nor would they be in position to evaluate the judgments of others that required deep, contextual scientific knowledge.

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177 Cushing, B. E. 1989. On the feasibility and the consequences of a database approach to corporate financial reporting. *Journal of Information Systems*, 3(2), 29-52.

178 Denna, E. L., Cherrington, J. W., Andros, D. P., and Hollander, A. S. 1993. *Event-driven business solutions*. Homewood, IL: Business One Irwin, 156.

179 Hamilton, J., and Trautmann, T. 2002. *Sarbanes-Oxley Act of 2002*. Chicago: CCH Incorporated.

On the other hand, it is conceivable that accountants could be effective auditors of the processes that come together to support fluidity and dual control. They could verify that education and training in fluidity and design were available. Teaching associated courses could well be done by accountants as well as other professionals. They could verify that appropriate efforts were carried out to recruit experts, to validate their knowledge, and to provide them with the resources they needed to participate. Accountants could provide assurances that effective technology management activities were carried out and that technology layer models were utilized. As such activities are necessary in order to achieve the goals of dual control, there is no reason that accountants could not carry them out. Non-financial professionals could also be recruited and prepared to carry out such tasks, as well.

### **Core system management**

*Core financial system management consists of the processes necessary to maintain the financial system in a manner that is consistent with established financial management laws, regulations, and policy. This function sets the framework for all other core financial system functions.*

To be fully responsive to policy, a national finance system needs to incorporate legislative as well as regulatory requirements in expressive knowledge forms. Decisions by authoritative government institutions need to be converted such that they are accurate representations of such requirements to be applied under appropriate conditions. Such conditions, as they arise, should be as self-defining as possible, triggered by data that is independently-derived, reflecting both natural and social conditions. Management of the system requires attention to both tasks. To the degree possible, electronic networks can serve to extend such functionality and provide high service levels with minimal costs.

Taming technology is an important prerequisite to achieving fully functional, legitimate systems of governance and finance. Deploying a layered approach to using technology is also of critical importance. In this way, not only will high performance levels be achieved, but improved security as well. Under a layered approach, experts and authorities will be able to function together freely to design systems features to support exactly what is needed.

### **General ledger management**

*General ledger management is the central function of the core financial system. The general ledger is the highest level of summarization and must maintain account balances by the accounting classification elements established in the core financial system management function.*

A general ledge of all things, or more accurately, of all processes, would be an enormous boon to all aspects of governance and fiscal performance. Blockchain technologies should be researched for this purpose. “Internet of Things (IoT)” technologies and models are also important developments in this regard. The architecture of financial systems would be substantially enhanced with a secure public ledger, also referred to as a private distributed ledger due to the inherent privacy of blockchains. A

recent project of this kind carried out by eleven major bank on three continents proved satisfying to the parties.<sup>180</sup>

In this approach, all transactions in the currency in question are recorded centrally, so there is independent verification than a transaction did take place. Details of the transaction are only available by means of an appropriate process carried out by a party authorized to access such information and only that information under certain conditions. The conditions are to be based on global-unique identification models (GUID) that are themselves organized and managed by authorized processes.

Appendix D provides some information with regard to the “Big E, little e” enterprise model, which makes reference to a general ledger structure for all kinds of processes, not just financial transactions. This is of critical importance in the effective integration of financial and non-financial processes. Of course, this is important in making sense of data emanating from IoT devices. It is of critical importance in the establishment of cooperativist organizations. Such an approach involves a much higher level of functional integration than could be provided otherwise.

Such a structure is of great importance as a regulatory and advisory tool. With a blockchain-based ledger of transactions, authorized parties can benefit from ongoing expertise-based views of data patterns as authorized via regulatory, legislative, and judicial institutions. Such parties could not have generalized access to any data in the system – indeed, no one does – but they would routinely be provided with reports and information based on authorized processes that addressed such data. Such outputs could trigger some activities automatically.

### ***Funds management***

*Funds management is the function that ensures that the agency does not obligate or disburse funds in excess of those appropriated or authorized.*

This is the treasurer function. Hernán Büchi lamented that at the beginning of the Pinochet regime in Chile in the early 1970s, this entailed the entrapment of any and all available funds in the realm to put into the “black hole” [our term] of the regime.<sup>181</sup> That frightening image aside, what should treasury entail on a national level in an environment of fluidity and dual control?

There is a political aspect. Ministries of finance exist to function in such realms. There is also an operational aspect. For this, there are banks. Each country typically has a central bank to oversee such matters. There is likely also be a treasury function, which is mostly political, but also operational – not the bank itself. Currency is to be managed, leading to the comptroller function.

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180 Nash, K. S. 2016, January 20. Major banks complete “modest” blockchain test, *The Wall Street Journal*, CIO. Available online: <http://blogs.wsj.com/cio/2016/01/20/major-banks-complete-modest-blockchain-test/>.

181 Büchi, H. 2011. *The economic transformation of Chile: A personal account*. Kindle ed., location 3382.

We are hardly in position to make recommendations as to the details of government finance. These are domains of knowledge and expertise that we view from the outside. However, we can comment on the implications of dual control and fluidity in the context of governance and finance and point out how these may relate to the histories considered earlier in this document. As to additional information, we have written two books dealing specifically with related issues: “The Big Step Forward to Knowledge-Driven Universal Coverage” considers country-level issues of finance and governance when taking on the commitment for universal health coverage on a national level in a dual control environment;<sup>182</sup> “Integration, Legitimacy and the Law: Ensuring Biology-Based Regulation” provides insights as to legislative and regulatory prospects through introduction of dual control and fluidity, where complex, process-centered legislative products could be approved and implemented.<sup>183</sup> This would involve the direct application of legislative mandates, a significant movement in favor of the legitimacy and efficacy of political and legal systems.

Finance represents the trust network of all trust networks. The fungibility of money makes this so. Money is a poor marker for all things, as we learn from history. The information component is sorely missing when market activity is carried out among strangers, particularly where modern, complex, subtle, difficult-to-evaluate products and services are in question.

Who is to adjudicate such matters? Who indeed but financial professionals? When an accounting balance is verified, what is the verification act than the substantiation that value exists? In the case of money, the quantitative report is sufficient – well, the currency in question is also a factor, but one steeped in a good deal of variable information. Understanding of this can only be derived through a methodological process, or a chain of them. When the people in question think about the money, they naturally reflect on what it will buy, what doors it will open, what results will ultimately be achieved.

Without governments, such activities would become highly skewed. One reason currencies have value is in recognition of this. Governments exist and persist because people want them there – because people need them there – to provide stability and legality and certainty so that such assumed outcomes will occur as desired. The more assured the people are that this will be the case the more loyalty and support they will grant. Not only does the legitimacy of the regime and its support structure improve, the value and suitability of the currency improves.

Thus, we can see that the treasury function at its core is a process improvement function. Perhaps we can more accurately say that it is a process validation function. Accountants – *treasurers* – can validate that value exists because processes exist and are being carried out by the proper people in each case. How can it be known that they are? We can trust them. Part of that trust is that we understand that

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182 Manicki, M., Putri, A. E., Ostojic, D., Tingey, K. B. 2014. The big step forward to knowledge-driven universal coverage. Logan, UT/Warsaw, Poland: CIMH Global.

183 Manicki, M., and Tingey, K. B. 2014. Integration, legitimacy and the law: Ensuring biology-based regulation. Logan, UT/Warsaw, Poland: CIMH Global.

somewhere in the system someone is validating that the steps are being taken. Those are the treasurers, or the accountants. The following fictional conversation considers such questions:

Person A: Let's use scientists as an example. Can they be trusted?
<i>Person B: Well, sure, but for what?</i>
Person A: Can they be trusted to give us good science, to arrive at answers to our problems that hold up with time?
<i>Person B: Possibly, but how would we even understand such things, to evaluate them in such a way that makes sense to us?</i>
Person A: Truly that is a part of the problem. Who knows what those people are doing? Governments spend a good deal of money on science and it is unclear what society gets in return. Let's restate the question: If there was a way to sort out scientific knowledge so that if you had a problem, the best available solution would be available to you, would you feel better about things or not?
<i>Person B: I don't know. How could I be sure that such a system would really be sorting out the good answers and not just putting out convenient answers or answers from scientists that aren't very good at it?</i>
Person A: So there would be issues. If you came to trust that a system could sort out the science in this way, do you trust that science exists somewhere that could substantially ease your mind in this way – that you would be getting the very best answers?
<i>Person B: Perhaps if I were sure of that, but how could such a system come about?</i>

So there you have it. We start and end with the trust network question. At this critical juncture, though, we must consider the question: Is there any other way this could occur than as just described? As it stands now, with knowledge and information the social and economic stepchildren of our age, what we described is simply not happening. It is not happening in the core. It is not happening on the periphery.

There is no rich country meticulously carrying out these various tasks in science – *even the critical areas of knowledge that have to do with our security and continuity as a race* – and hoarding it for their individual use. Scientists publish reports of their work, they often present such material in verbal form in a conference setting. Then very little of it makes it past the static representational forms used to put it on the page and store it somewhere. The scientists – individually and severally – may know what they are talking about and may be totally in the dark. Certainly there are “pecking orders” among scientists, but without some way to utilize and validate their work, there really isn't a way to know.

Given the challenges we face in our troubled world, it is about time we found out.

How do you come to trust scientists? *First*, you educate the general populace and provide opportunities to individuals who demonstrate capacity for scientific study and interest in it. *Second*, you provide opportunities for them to apprentice in the fields of science that they gravitate to and are accepted in.

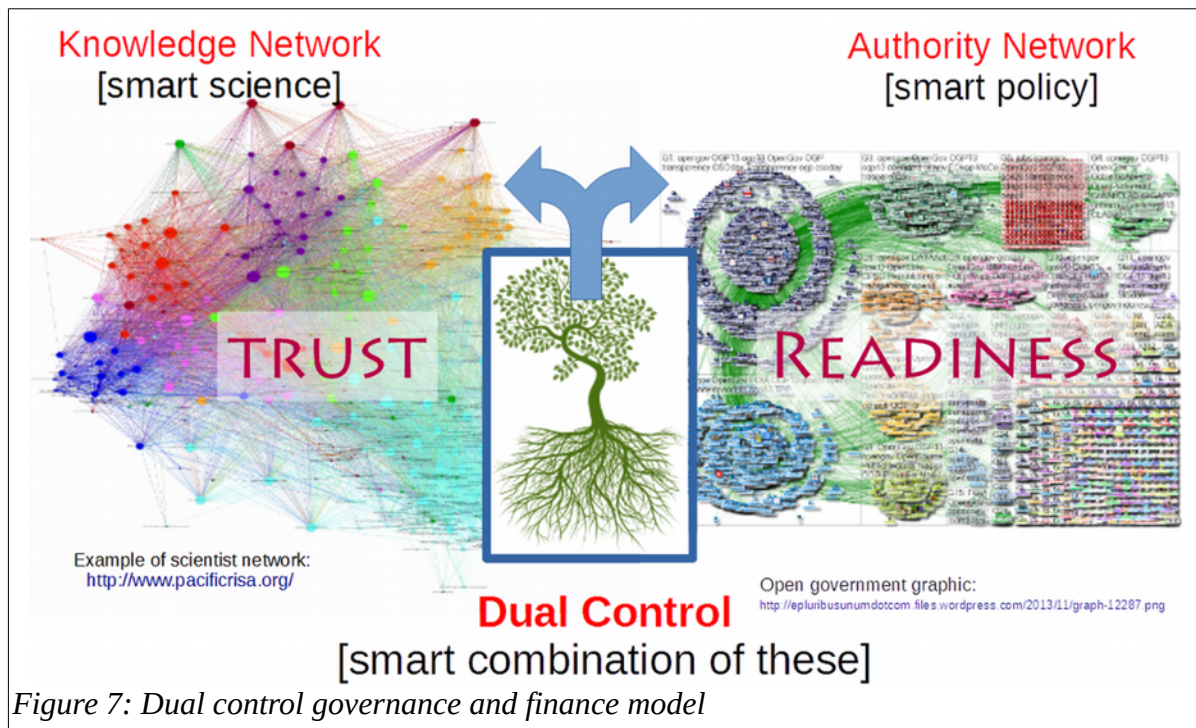
*Third*, you provide resources to them – careers. *Fourth*, you educate them in fluidity and expressive knowledge forms and provide them with associated tools and systems. *Fifth*, you establish methods to identify the best work in important fields of scientists. You use other scientists, generalists, to do this. *Sixth*, you establish independent systems to gather data and support integrated operations to deploy this work product in acceptable ways and to evaluate outcomes. *Seventh*, you maintain the system such that the scientists in question only have power and authority over those specific areas in which their work has been judged to have merit and to be effective. There cannot be any “wandering around” in the system by the scientists, by experts generally, nor by technologists – who will be specifically restricted to their assigned and authorized technology layer.

Can trust be rationally granted in such situations? Yes, we believe that this is the case, particularly as the system matures and demonstrates a flow of beneficial outcomes. This is a task that must by its nature be carried out by government. To be fully effective, it needs to be a major part of a global program for governance and finance. As can be seen in *Figure 7: Dual control governance and finance model*, a model for making use of scientific knowledge can be matched with a parallel model for policy to achieve a governmental environment capable of operating at a very high functional level. The questions of trust that are a fundamental part of the knowledge infrastructure matches with the institutional readiness plan of government itself, resulting in a governance environment that is both effective and flexible.

One important factor is the neither politicians nor administrators need to master all of the knowledge in the world in order to carry out their responsibilities. As with the general public, they trust that the scientists are doing their part – trust that is reinforced by independent data collection and evaluation.

That trust of this kind can be granted might be something of a shock. Many of us likely do not think in such terms. Think of the kind of trust that is being granted currently by default. We hope someone has an answer to our problem. Actually, we may not know that we have a problem, so we trust that nature or fate do not have a negative surprise in store that could otherwise be found out. We hope that the answer that the scientists came up with are published in some way that people that can help you become aware of it. We hope they read it or otherwise find out about it. We hope they recognize it for what it is and are reminded of that when they think about you and your situation. We hope that they have the right information at the time to recognize such a thing. We hope that there are not other scientists, or providers, or manufacturers, or vendors that have a perceived vested interest in you not finding out about the solution do not find out about the opportunity and make sure you don't get it, for their personal gain.





For all of this, you need government.

As to the treasury people, the bankers and accountants. Do you want this job? It is deeply embedded in your DNA, specifically considered in 1969 by Dr. Sorter when he initiated the event accounting tradition (see Appendix D). One important thing to keep in mind: If you do not take the job, others will and the time will come when they are knocking on your door, not the other way around.

### **Payment management**

*Payment management is the function that provides appropriate control over all payments made by or on behalf of the agency.*

In a highly networked, integrated environment, disbursements are seldom simple affairs. Accuracy needs to be considered as a paramount feature of the system. W. Edwards Deming often made reference to “burnt toast” as an issue in all aspects of management, of particular importance when handling funds. The solution to burnt toast is not finding a good way to scrape off the black layers, it is to stop burning the toast in the first place.

In a dual control environment characterized by event accounting principles and fluidity, fulfillment will be much more readily discerned. This is a fundamental benefit to fiscal controls as well as private-public partnerships.

## **Receipts management**

*Receipts management is the function that supports activities associated with recognizing and recording debts due to the government, performing follow-up actions to collect on these debts, and recording agency cash receipts.*

Receipts management needs to consider aspects of fulfillment, as many projects and transactions begin with acceptance of receivables. Similar to the payment management process, under dual control and fluidity it will be a much more straightforward task to dig down into supporting processes to validate performance in both service and product environments.

## **Cost management**

*Cost management is the function that attempts to measure the total cost and revenue of federal programs and their various elements, activities, and outputs.*

In an environment of fluidity and dual control, a focus on process is altogether more natural and efficient than in a typical information processing environment. All aspects of statistical process control can be applied, on a higher level than otherwise possible because processes can thus be fully responsive to available knowledge and experience. Appendix D includes a section on Methods-Based Management, which is an organized approach to achieving fluidity of knowledge in a process-centered way that can make use of statistical process control. The point is that technology needs to be embraced in such a way as to empower experts and authorities so that their knowledge will be used as they apply.

Focus on cutting costs directly, without making use of knowledge inputs and process improvements, is a serious mistake. This opens the door for what W. Edwards Deming refers to as tampering. His point is that best efforts of uninformed workers or managers is the biggest risk organizations and networks of providers face. Decisions need to be made based on knowledge, on understanding of root causes coupled with methodical evaluation of the behavior of processes. The effectiveness of process control methods has been well-established for almost a hundred years. Given that such efforts began in production and manufacturing environments, the perception developed that they only apply under such conditions, but this is not in any way correct. A process is a process is a process – whether in nature alone or in human-derived activities that make use of time, energy, and resources.

Even though such methods have proven their worth, they have not contributed to governance problems for the most part. In part this is due to the question just considered – the thought that process methods only apply in a production environment. Little effort has been placed in the application of process methods to governance, managerial, and supervisory tasks. An equally galling problem is the lack of core support in information processing systems for process approaches. There are products for evaluating process performance once the processes themselves have been otherwise defined. Technologists keep a firm hand on the design function itself.

Cost control is first and foremost an educational task at all levels, starting with governance and finance. First, participants must understand the general principles, the questions of dual control and fluidity in general as well as statistical process control efforts in general. Once there is generalized understanding of these concepts, the underlying questions as presented by the processes in question need to be addressed. This comes from extending existing knowledge, in the heads of the people in question (tacit knowledge) and in available documentation, multimedia sources included (explicit knowledge). These need to be put into process form using tree-based models without interference from individuals not knowledgeable or informed in the subjects in question – especially not from computer specialists, who have been trained to be dismissive, condescending, and unresponsive in such matters. In this we refer to as the “layered approach.” People with deep knowledge and experience in the subject at hand – unencumbered by such outsiders – can come up with real and permanent solutions. Among other things such solutions will bring better results and will cost less. This is the state of “permanescence,” when the best available knowledge is made available for the use of others when needed by means of the system, resulting in optimal solutions across-the-board. This is where the operations of organizations match those of the great musical conglomerations, as they perform the grand music of the Masters – of Beethoven, Bach, Mozart, and the rest. This is what cost control is all about.

## **Reporting**

*Reporting is the function that provides timely and useful financial information to support management’s fiduciary role, budget formulation and execution functions, fiscal management of program delivery and program decision making, and internal and external reporting requirements.*

Reports are tree-based phenomena, as acknowledged in the introduction of tree-based data models through eXtensible Modeling Language (XML) and its derivatives. Given the tree-based structure underlying expressive knowledge forms, there is a natural relationship between processes and explicit forms of knowledge, which make up virtually all forms of reporting. Good processes weave in and out of the reporting function, providing information and feedback to system users and creating data combinations for the use of machines and parallel systems. There is a third tree-based construct referred to as directories, for which there is a strong technological tradition as well.

Working in parallel with tree-based data is a secondary tagging tradition called meta-data. This, too, is important, supported by the concepts of fluidity and process-based methods. An important factor in the “Big E, little e” approach is that data is not transferred from one place to another, but as processes advance from stage to stage, data with regard to them is both updated and aggregated. As a result, the system gains relevance and complex situations can be resolved without adding to the complexity arbitrarily by means of the system. Complexity of the natural order does not justify complexity in modeling such conditions where it is not warranted. On the other hand, simplicity “under the hood” as well as in reporting and updating functions is sorely needed.

This is the order of the day with regard to systems imbued with dual control and fluidity: (1) Users should never see anything they do not need to see; (2) Users should never seen anything in a session that is incompatible with a decision they have already made in the session or in a preceding process that was linked in; and (3) All aspects of the session needs to be responsive to the needs and preferences of the user, who needs to be free to end a session and return to the same point at a later time, to back up in a session – unless there is a reason to not allow this, to test out different options – unless there is a reason to not allow this, and to carry out the sessions using whatever devices or technologies they wish. Of course, users should be able to weave in and out of whatever languages they wish and utilize any assistive devices and tools as they require.

## Capital market regulation

Joseph Schumpeter has declared it<sup>184</sup> and there is little evidence that he was altogether wrong: Economic growth is strongly supported by the existence of capital markets.<sup>185</sup> Many modern developmental economists have declared it and there is little evidence that they are altogether wrong: There must be growth to achieve prosperity.<sup>186</sup> This is a principal claim by recent Nobel Prize winner Angus Deaton.<sup>187</sup> He provides further support for the idea that such growth correlates with savings rates, which is at least an indirect testament to the importance of capital markets, or the existence of capital, at least.<sup>188</sup>

Of course, there is the desire for growth, and capital markets have been held to be superchargers for that. Growth is universally thought of as being good, but there are different dynamics that need to be taken into account. How is growth is achieved has much to do with out it is achieved. How do capital markets factor into that? How does the BWA Consensus cast light on the issue? How can and should capital markets on the periphery function? Are we talking about a new cooperatist core? Are we talking about a networked system as opposed to hub-and-spoke?

The foundations for what we need are a gift of nature, although we do not live in a Garden of Eden. There are some benefits that we can get for free, but they are increasingly more difficult to come by with urbanization and distance from that beneficial and perhaps proverbial garden. Modernists insist that a break occur between growing food and prosperity generally. Prosperity is not to be achieved on the family farm. And yet, only a few years ago, where did many of the recently urbanized Chinese go

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184 King, R. G., and Levine, R. 1993. *Finance and growth: Schumpeter might be right*. Washington, DC: The World Bank Country Economics Department.

185 Schumpeter, J. A. 1911. *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*.

186 Fajnzylber, F. 1990. *Unavoidable industrial restructuring in Latin America*. Durham, NC: Duke University Press, 64; Rosenberg, N., and Birdzell Jr., L. E. 1985. *How the West grew rich: The economic transformation of the industrial world*. New York: Basic Books.

187 Deaton, A. 2013. *The great escape: Health, wealth, and the origins of inequality*. Princeton, NJ: Princeton University Press.

188 Deaton, A. Understanding the mechanisms of economic development. *Journal of Economic Perspectives*, 24(3), 4-5.

when the Great Recession hit? What have the Poles consistently done when faced with economic and political reversals? One American working in Poland offered his assessment that the country was “one big garden.” Under Islam, is not this a fundamental tenet, a “sticking point” as indicated by Aydin in Turkey's negotiations with Western bankers who demand that they be weaned from their gardens? Chile, of course, is another example of this.

In the Western United States in the 1870s, communal activities were able to account for 85 percent of what the people needed; they were paid the rest of their wages in hard currency.<sup>189</sup> Share of off-farm income to farm household income, a ratio that is What useful heuristics, or “rules of thumb.” This is to say, if everything came tumbling down, how would you get by? In a society this is an important thing to know, to keep track of. Given that the economy is designed to meet societal needs, this should be an important aspect of economic design.<sup>190</sup> Of course, imports and exports are tracked on a national scale. They may provide something of an estimate of this as to the economy overall, but not of those critical foodstuffs that keep us alive. Such efforts can be considered continuation and augmentation of Household Responsibility System (HRS) efforts, which have proven so effective.<sup>191</sup>

Is this anti-modern? Perhaps it is, but modernity has shown itself to be very brittle. Schumpeter, the closest thing to an economist with universal credibility, noted that Karl Marx predicted that “capitalist evolution will destroy the foundations of capitalist society.” How did Schumpeter react? He agreed by saying, “I believe it is [true]. And I do not think I am exaggerating if I call profound a vision in which that truth stood revealed beyond doubt in 1847.”<sup>192</sup>

What happened in 1847? What could have caused an erstwhile economist such as Dr. Schumpeter to lose faith altogether? This is an important question, surely more important than being drawn into a scholarly treasure hunt. What *did* happen in 1847? On the other hand, how to you complain to a long-deceased gentleman?

On the historic register for that year we see one economic event of some magnitude, the “Panic of 1847.” According to David Glasner, this “was a *minor* British banking crisis associated with the end of the 1840s railway industry boom and the failure of many non-banks.”<sup>193</sup> Apart from Glasner's disagreement with that of Schumpeter as to the gravity of the event, there is a very good chance that

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189 Arrington, L. J. 1976. *Building the city of God: Community & cooperation among the Mormons*. Salt Lake City, UT: Deseret Book Company.; Arrington, L. J. 1958/1966. *Great basin kingdom: Economic history of the Latter-Day Saints 1830-1900*. Lincoln, NE: University of Nebraska Press/Harvard University Press, 330-338.

190 Parsons and Smelse.

191 Lohmar, B., Gale, F., Tuan, F., Hansen, J. 2009. *China's ongoing agricultural modernization: Challenges remain after 30 years of reform (EIB-51)*. Washington, DC: Economic Research Service/United States Department of Agriculture, 3-10.

192 Schumpeter J. A. 1942/1950. *Capitalism, socialism, and democracy* (3<sup>rd</sup> ed.). New York: Harper & Rowe, Publishers, 42.

193 Glasner, D. 1997. Crisis of 1847. In D. Glasner and T. F. Cooley (Eds.). *Business cycles and depressions: an encyclopedia*. New York: Garland Publishing, pp 125–128.

this is Schumpeter's capitalist nadir that we are looking for. This is underscored by noting that other commentators agree more with Schumpeter than Glasner on the gravity of the 1847 event.

The panic was a familiar affair to anyone who lived through the Great Recession of 2008. Having enjoyed a few years of “good times,” people invested in investments in “to be built” railroads. This was on a scale that was unlikely to be fulfilled, created by halfhearted efforts and overblown sales promotions. Many of the companies in question promptly went out of business. The banks were adjusting to this shock when an agricultural crisis occurred. An annual crop mostly failed. Anticipating high commodity prices and a speculative opportunity, many people bought futures contracts, expecting commodity prices to fall, especially for corn. When a good harvest came in, the short sales triggered many more bankruptcies, putting increased pressure on the banks, which were already reeling from the railroad affair. Recent legislation had restricted the central bank from expanding credit, resulting in a “week of terror.” The legislative barrier was then reversed and the central bank provided more credit and raised interest rates, which attracted a significant amount of gold to the bank. The quote “seven percent will draw gold from the moon” was one result.<sup>194</sup> Another result was a lesson learned – perhaps not one that led to wise governance: Capitalistic excesses can be mitigated, at least for the time being, with lots of credit. In modern terms, this was Keynes over Schumpeter and Hayek.<sup>195</sup>

In the first capitalistic errors, greed stimulated irrationality. In the second, a natural disaster elicited excessive, if not irrational conduct – particularly as it came on the heels of the first catastrophe. The banks did recover. Schumpeter's loss of faith is not likely to have resulted from that side of things. The irrationality is difficult to justify, of course. This is particularly true since it happens time after time after time – to the present day.<sup>196</sup>

The question here is not a matter of trade. It is not a matter of wealth. It is not a matter of commercial gain, nor of power, nor of democracy, nor of ease, nor of freedom, nor of good versus evil. The question here is whether it is a good idea to separate value from productive effort in this manner. If it is a good idea, what conditions should be imposed on it? The fundamental questions are, “How can wealth best be created without such risks and wild gyrations; how can growth occur with some sense of stability and balance for the betterment of the people?”

If the principals of a business can pull their own resources together to make the business work, that is better for their prospects, all things being equal. They can carry out their plans on their own –

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194 Narron, J., and Morgan, D. 2015. *Crisis chronicles: Railway mania, the hungry forties, and the commercial crisis of 1847*. New York: Liberty Street Economics/Federal Reserve Bank of New York.

195 Hayek, F. A. 1966. Personal recollections of Keynes and the “Keynesian Revolution”. In B. Caldwell (Ed.), 1995, *Contra Keynes and Cambridge: Essays, correspondence. The collected works of F. A. Hayek*. Indianapolis: Liberty Fund, 240-246; Schumpeter, J. A. 1942/1950. *Capitalism, socialism, and democracy*. New York: Harper & Row, Publishers, Inc., xxix-xxx.

196 Schumpeter, J. A. 1911/1934 (Eng. tran.). *The theory of economic development* (R. Opie, tran.). New Brunswick, NJ: Transaction Publishers, 212-255.

leveraging their knowledge and skills to the extent that they have them. There are fewer people “living out of the same rice bowl,” under such conditions, making the effort more profitable for each, all things being equal. Proprietorship of this kind would have less pressure from outsiders to take money out of the company or act in ways that may or may not meet the needs of the enterprise or its primary owners.

What if more money is needed to start or to carry out the business? This is where the “magic” of capitalism enters in. People with money “lying around” could possibly provide it to the enterprise either as a loan or by buying in to the company. This complicates things, of course. Many issues are raised – considered to some degree throughout this document. The point is that this process of bringing in outside moneys opens a potential “Pandora's box” of issues with significant social as well as political and economic implications.

Traditional economic development programs insist that this tradition be part of the program to the degree possible. They not only insist that it occur, they insist that it be carried on in a fully open environment, will full international participation. This in spite of the fact that the story of the “Panic of 1847” has and will happen time after time after time. Such gyrations will happen with more force and regularity when extended to a worldwide arena, as has repeatedly been the case. Countries can institute capital controls, of course, and otherwise take actions to protect themselves from the ravages of the market. The postwar consensus among the nations of Europe and North America did exactly this. The plan that seemed to work, at least for a couple of decades.<sup>197</sup>

Another factor needs to be considered that is similarly undeniable. Capitalism does encourage irrationality on an increasingly larger scale. This should come as no great surprise, as cooperativism also has this effect. The older the markets, the bigger the markets, the more there is to be lost when the people “find out.” The first and best defense has always been to simply ignore the truth; to deny that the sun is shining at mid-day if someone should point out the delicate fact that it is. As a result, mankind has the curious characteristic of exhibiting great creativity and brilliance when faced with inexorable tasks of survival, but progressively less clever when faced with peaceful progress. This is a social failing that expresses itself on an organizational scale.

Schumpeter does not agree with Marx as to the inevitability of capitalism's demise, not quite. He does make it clear that he is pessimistic as to global capitalism's prospects. We have to admit, seeing the process occur time after time after time for more than a hundred years makes it difficult to cultivate an optimistic viewpoint. Of course, Schumpeter did not see the potential for improved management of knowledge through technology. This can easily be countered by real events. In spite of considerable

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197 Gourevitch, P. 1986. *Politics in hard times: Comparative responses to international economic crises*. Ithaca NY: Cornell University Press, 167-169.

commitment to dissemination of this kind, it has conclusively been shown that people can be fooled “every time”,<sup>198</sup> to the point that science itself has no bearing, nor credibility.<sup>199</sup>

On this score, what can be said for the prospects for effective capital markets, particularly of a cooperative, rather than a corporatist kind? Are there groundings for a cooperatist capitalism? Could capitalism be carried out in a more functional manner if knowledge and information were organized for the general good, less susceptible to speculation and deception? In the current environment, public equity markets are a most awkward of constructs. Somewhat aware of the importance of information, they force abnormalities in stores and flows of information that guarantee that critical capital-related decisions will be carried out in ignorance. In other words, in order to meet an awkward concept for what a securities market ought to be, information must be hidden from knowledge altogether or at least highly skewed for a period of time to guarantee that some will benefit from the knowledge at a cost to others. There is a zero-sum presumption built into the system for this very purpose.

We believe that there is an antidote to such artificial market machinations. It may surprise you. We recommend more democracy. You may respond, incredulously, that perhaps the problem with capital markets is too much democracy. We refer to a brand of democracy that may have different connotations that is generally thought possible. Charles Tilly, who studied democracy from many perspectives through his long career provided the first of two significant ideas on this score. He made the case that democracy is comprised of trust networks. This is a promising concept with regard to capital and we will consider implications of this.

Trust networks are ramified interpersonal connections, consisting mainly of strong ties, within which people set valued, consequential, long-term resources and enterprises at risk to the malfeasance, mistakes, or failures of others. Trading diasporas, kinship groups, religious sects, revolutionary conspiracies, and credit circles often comprise trust networks. Throughout most of history, participants in trust networks have carefully shielded themselves from involvement in political regimes, for justified fear that rulers would either seize their precious resources or subordinate them to the state's programs.

So long as they remain entirely segregated from regimes, however, trust networks constitute obstacles to democratization; their segregation blocks members' commitment to democratic collective enterprises. Democratization becomes possible when trust networks integrate significantly into regimes, and thus motivate their members to engage in mutually binding consultation – the contingent consent of citizens to programs proposed or enacted by the state. Two large processes affecting trust networks therefore underlie democratization: (1) Dissolution or integration of segregated trust networks; and (2)

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198 Akerlof, G. A., and Shiller, R. J. 2015. *Phishing for phools: The economics of manipulation and deception*. Princeton, NJ: Princeton University Press.

199 Oreskes, N., and Conway, E. M. 2010. *Merchants of doubt: How a handful of scientists obscured the truth on issues from tobacco smoke to global warming*. New York: Bloomsbury Press.



Creation of politically connected trust networks. In Switzerland, the violent struggles of 1830 to 1847 and the peace settlement of 1848 promoted both processes.<sup>200</sup>

Such trust networks resonate with the histories of China, as well as Poland and Islam. Truly, such networks have existed, and continue to exist. As considered earlier, they represent a core element of civilization, a passionate and committed collection of families dedicated to the well-being of their members and the continuity of their protective combines. Viewed from their perspective, this is a challenging and dangerous world. Why should they open up to the state? Indeed, why?

We believe in an inclusive form of rationality. Important questions need to be considered from the perspectives of the head, the heart, and the hand, through thoughts, feelings, and mechanisms. Logically, then, the trust networks, the clans or families or communities, would open up to the state because it was in their interest to do so. They would trust that the resources of the state would be used in their best interest. As to feelings, they would need to feel safe doing so. As to mechanisms, they would need to be able to see that they functioned well and that they would serve the intended purpose while not compromising that which was of great value to the clan.

Starting with mechanism, how could such relationships between families and clans be carried out? How would such connections meet the needs of cooperativist enterprises, of family-oriented enterprises, to gain appropriate capital levels? A principled approach, given the traditions and histories that we now better understand, is to not separate capital from production. This is to say, to not establish a currency-based exchange with liberal entrance requirements. This can be said to be a practical approach as well, as there is much evidence and a long history of instability resulting from such programs.

The function could be carried out through private consultation. On the one side would be family business representatives, however construed. This could involve individual family members, communities, clans, and other people and groups for which there is a high level of cohesiveness. The makeup of the group could serve as a matter of consultation as well as a factor in other matters.

Who or what would be on the other side of the table? We recommend a collection of “modern mandarins,” (along with Muslim imams with similar preparation for when Islam is a part of the program). Yes, we are recommending that China bring back a meritocratic mandarinat. This would be a program much like the system that brought Chins through thousands of years of stability and consistency. The Confucian concepts would surely be modernized to reflect modern concepts such as those introduced by Liang Qichao and others and “socialism with Chinese characteristics”. This would be a high status position, achieved through much study and preparation, selected by means of a rigorous testing and certification program.

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200 Tilly, C. 2007. *Democracy*. Cambridge, UK: Cambridge University Press, 74.

These advisors would be steeped in all aspects of family preparation and guidance, including economic and management questions. It is possible that they could represent the government directly or be agents working within the banking system, or even sole practitioners and specialists. Understanding the importance of this traditionally, they should surely function with some form of acknowledgment and certification. They should be seen as wise counselors to be sure, but also agents with the capability of arranging for appropriate permanent capital for enterprises in question.

Victory would be in sight when and if diaspora members began to make use of the service. It is conceivable that this could happen as trust was earned. It was there before. Why couldn't it be there again. Of course, trust runs two ways. Why would the state participate in a program of clan development that may result in the creation of powerful families that may be interested in political gain. There is a possibility that such powerful families would challenge the state itself.

In this, it is important to consider the nature of the PCISKM actor model that we propose. The purpose of the model is to establish policies and programs for balance among such actors. To this point, we have not considered the nature of the Chinese Communist Party as among the actors. Clearly, if there was a challenge to the Chinese state by powerful families, clans, or collectives, it would occur in the form of a challenge to the Party. In the model, we have thought of the Party itself as an “I” or institution rather than the state itself, as an “S”, or as a clan, “C”, or other form. It is the strength of the Party in this capacity, the strong “I”, that contributes to the strong “S”. As to the Tully model, the trust network of the Party, we propose, comes into contact with the trust networks of the families, hopefully many of them diaspora families.

Clearly, the objective of the Party is the promulgation of a stable, independent, strong state, the nation of China. Is this compatible with a strong Chinese diaspora? It is under certain terms. There must be control; there must be stability. This experiment in the wild embrace of all things Western, particularly of late in finance and economics, has taken a huge toll on Chinese in all parts of the world. Truly, there have been many who have thrived in the environment of loose, ill-defined markets and misinformation on all fronts. They have money and what money can buy. These are tremendous benefits. As Angus Deaton has said, “Money can buy happiness.”<sup>201</sup>

There are far more capital assets than are required for commerce through any stretch of the imagination, yet money cannot buy optimum performance living. At this time, there is not a person in the world with a “clean bill of health”. The richest family in the world can walk out of the clinic in apparent good health and be diagnosed the next day with a terminal illness that had not been detected. This problem cannot currently be solved with any amount of money. Bringing together existing knowledge to answer that question is beyond the capacity of any private organization and is a political

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201 Robison, J. 2008, April 10. *News flash: Money does buy happiness: A GMJ q&a with Angus Deaton*. New York: Gallup Management Journal.

impossibility for any nation not armed and empowered with dual control and fluidity. The United States has the most knowledge in store, but it cannot be directly used for economically-driven reasons that render the politics impossible. The United Kingdom is probably next in line in terms of knowledge. That is a political impossibility as well and we have a letter dated the 7<sup>th</sup> of August, 2014 from the leadership of the National Health Service in the UK making it clear they have no basis for understanding the optimum performance living concept, nor interest in even learning more about it. The solution will not come from there.

If China, in partnership with Poland and UAE, leads out in the resolution of this critical issue in the area of health alone, it will have earned the trust of the nations of the world and its peoples, including those of the Chinese diaspora. The Chinese Communist Party, in leading out in such an effort, will extend its network of trust to legitimately link with the other legitimized networks of trust throughout the world. This will be an attractive force for citizens of the Peoples Republic of China as well as the diaspora. It will form strong links through Islam and through Central Asia to Poland and Europe.

Our belief is that these developments will turn the tide in favor of Chinese initiatives in this regard. We believe that the people will come, will participate, and will see that the initiatives will open the door to capital to be sure, but also to other key aspects of their happiness and peace.

Then there is the question of exchanges and how to manage them. Under fluidity, system managers should be ahead of the game in terms of knowledge-based solutions and in the implementation of associated processes. Once capital markets, or other kinds of markets, are decided upon, explicit means should be laid out to support their effective implementation. The Stiglitz list of concerns constitutes a useful starting point: Make sure there are *no externalities* (no problems of air or water pollution), *no public goods*, *no issues of learning*, *perfect capital markets* (in the sense that there be no missing risk or inter-temporal markets), *no imperfections of information*, *no changes in the information structure*, and *no asymmetries of information*. Obviously, to the extent that such capital markets were open to the West, all of this would be impossible. They are designed to specifically recuse themselves, or excuse themselves, from the information problem.

Take the biotechnology industry in the United States. In 2015, 35% of all initial public offerings in the country provided funding for companies described as fitting this description.<sup>202</sup> There are trust networks in place, of course. Are those grounded in knowledge, in the germ of scientific findings and development? Perhaps there are good things in store, but history dictates a far more pessimistic scenario, that what is being offered passed the test for profitability and may have little or no legitimate science to offer. Process could perhaps help to ameliorate the problem on a case-by-case basis. It is much more difficult “when the cat is already out of the bag.” With time, dual control should bring improved social returns leading to superior financial performance.

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202 Leveque, H., and Dhar, N. 2016. *2015 annual US capital markets watch: Analysis and trends*. New York: PwC, 17.

If the dual control governance program described before were to come to exist “at the snap of your fingers,” capital markets could carry on, but on a higher cognitive level. Products and services would still be needed. Capital assets in some form would be desired and well could be offered. It is possible that even Confucian and Islamic financial assets could be provided in such ways.

Regardless of the degree of emphasis placed on domestic capital markets in China, currency flows and market effects will be very important. Chile instituted an interesting regimen for limiting capital exposure in the 1990s by means of its *encaje* system. That program required that a portion of capital investments in the country, 30% initially, needed to be committed for a minimum of one year. This smoothed the flow of capital in and provided some assurance that it would not all disappear overnight.<sup>203</sup> Of course, China is no stranger to capital controls; dual control and fluidity allow for more targeted, knowledge-based application of such policies.

## **Currency management & policy**

China has made its objectives clear with regard to its currency. Its plan to establish an alternative currency regime to that of the U.S. dollar has captured interest by many states, where currency swap programs and other supporting efforts demonstrate their interest. Eichengreen and Kawai edited a comprehensive review of suggestions from the international financial community as to what can be done by China in this regard.<sup>204</sup> Following are comments with regard to such plans from the perspectives of dual control and fluidity.

## ***Re-balancing the Chinese economy***

This is a curious term, as it has entirely different significance under cooperatist as opposed to corporatist assumptions. What does balance mean? There are several meanings with regard to governance and finance. Fundamental among these is an accounting definition, meaning that items in a transaction are correctly recorded or an account's entries have been found to accord with the many entries that have occurred. It can mean that a form of public-private balance exists, or that temporal balance of growth, maturity, and decline exists, as per the model economics approach. In saying the China needs to re-balance its economy, there is acknowledgment that at some time in the past it was balanced. When would this be?

Calling attention to China's 5,000-year history, many point to the terracotta soldiers and the mysteries of Shi Huangdi. This is ironic, to be sure, as his dynasty died with him. The imbalances existing under his reign caused the people to embrace the Confucian model, developed during the Warring States period before the reign of the Great Emperor, when the people, longing for peace, became

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203 Santiso, J. 2006/2007. *Latin America's political economy of the possible: Beyond good revolutionaries and free-marketers*. Cambridge, MA: The MIT Press, 109-110.

204 Eichengreen and Kawai.

philosophical. Beginning with the earlier Han dynasty, balance was achieved in that way. The people loved it so much that the Chinese Way thus repeatedly conquered the conquerors.

Of course, the economists mean an entirely different thing. There are two things that bother them. One is that China has invested so much money in advance of demand, and this on construction and infrastructure. They are concerned that such commitments will not be needed for quite some time, if ever and thus will not contribute to future economic capacity. The other major balance issue is in consumption, particularly consumer consumption. Economists would like for policies to exist that would encourage purchases, that would result in larger consumer markets in China.

These are easier said than done, of course. The question is of higher domestic demand, both in terms of consumption and savings. How does this occur? It cannot occur in any sustained way with dissipation, so it is of critical importance to deal with the social issues. By resolving the family issue, there will be fewer payments for foreign brides and fewer gambling losses – whether from direct gambling or indirect, gambling-like stock purchases – and more investment and enterprise in earnest. This could contribute to cooperativist deal-making, possibly even in partnership with state-owned enterprises.

### ***Developing China's financial markets and opening them***

If financial markets are held in question, the definitions of securities themselves needs to be considered. Is China to subsume a corporatist model principally, which is assuredly mostly assumed by Western authorities and interests?

### ***Establishing a more flexible exchange rate***

This act, of course, depends on the effectiveness of the rest of the economy. Are there self-correcting mechanisms now. How would the introduction of dual control and fluidity in national governance models effect such mechanisms?

### **Data management**

Nothing lasts forever. The question is whether data should. The infrastructure we are considering involves untold volumes of data. How is this to be managed in the long term? We can initially look to nature for an answer. Of course, data is largely embedded in natural phenomena.<sup>205</sup> That may be a key to long-term solutions, also to more optimal short-term storage options.

Donald Skupsky has provided models for managing various forms of data and there are legal and commercial laws and norms.<sup>206</sup> Answers exist in different countries and regions. The answers to such questions are surely subject to expert interpretation and process design as is the case in other areas of

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205 Ifrah, G. 2001. Chapter 7: Information, the new universal dimension. In G. Ifrah, *The universal history of computing*. New York: John Wiley & Sons, 323-347

206 Skupsky, D. 1988/1989. *Recordkeeping requirements*. Denver, CO: Information Requirements Clearinghouse.

knowledge and authority. Management of media is a critical function as well, as there are many questions as to access factors, duplication, data structures, security, decay rates, and media life cycles.

## Part III – Declaring a Beijing-Warsaw-Abu Dhabi Consensus

Any international political and economic system that does not allow the nations of the world, nor their people, to agree to disagree is a non-starter. That being said, any international political and economic system that is not based on consensus and commitments in fundamental areas is equally ill-fated. The effort to establish a model based on the experience of China, Poland, and Islam and their peoples addresses conditions faced generally and the unique histories represented by these three nations and the longstanding civilizations they represent.

According to this logic, nations may ignore the BWA Consensus altogether, but there may be risks in doing so to the degree that the mutual commitments therein invest these countries and close collaborators with social, political, and economic advantages. Our objective is to introduce the key collaborative elements such that they can be introduced incrementally, proving themselves out in national and regional contexts. Based on a philosophy of openness and a commitment to standards where they exist and collaborative establishment of standards where they do not, the BWA Consensus effort should assist in the resolution of vexing social, political, and economic problems in such a heterogeneous environment.

### What kind of consensus is needed?

The temptation would be to say that reforms cannot be made *because of* the magnitude of the task. This cannot be. The magnitude of the problem calls for immediate resolution: Chaos is expanded on with each level operations, with each link in the chain of activity. Given the lack of adequate governance, single faults or oversights can result in thousands, then millions, and billions of problematic instances of error, each compounding problems and eliminating desired results.

Gourevitch makes reference to a “race to the bottom,” conditions resulting from a lack of adequate governance. This negative condition results in a continuing spiral downward. In his case, in referring to governance, he is talking about investor rights, minority vs majority. The concept refers to governance that is more broadly defined. As John F. Kennedy pointed out, “A rising tide raises all boats,” improved governance – indeed, knowledge-driven dual control – allows all people to make use of the highest forms of knowledge at all time. This is of particular importance in matters that really matter to us all, relating to public and private health, social cohesion, and ongoing prosperity and peace.

Taking a page from the arts, one can ask the question as to why the great musical organizations repeatedly perform the works of Beethoven, Bach, Brahms, Mozart, and the like? Given the choice, why would they subject themselves to anything else?

Poland, China, and UAE are in pivotal positions with regard to finance and governance models. They both have long traditions of political and economic development that span many centuries. They incorporate models from prevalent systems, but retain their uniqueness. With shared Soviet experience, each country established its own norms and practices in those times, leading out in the socialist community in many ways. In recent decades of reform and openness, in both cases, efforts have been carried out to conjoin with economic and financial models of Western Europe and North America, but with mixed results. There have been decided improvements in income levels and, in many ways, including income levels and the economic well-being of the people, but there are institutional and market limitations in prevalent finance and governance markets that are unacceptable, given standards of fairness and protection, and the challenges faced in both countries, and to many other countries.

The Emirates is in a key leadership role, adjudicating a bridge between the Middle East and all other parts of the world, with a particular leadership role in Islam. Hosting the Expo 2020 in Dubai is a key element in this role, the opportunity to attract the attention of the world not only to the benefits of knowledge-driven universal coverage in health, but in the establishment of a new economic development model in the BWA Consensus. Uniting the major traditions of the world through more effective use of technology and expert-driven models will set civilization on a path of sustainability and prosperity that will stand the test of time

We propose establishment of a consensus in terms of economics and finance based on these three traditions. It is also helpful to include successful ethnic development efforts from other parts of the world that should help to inform cooperative and collaborative needs of ethnic populations. The point is in the establishment of a cooperative, collaborative model based on historical examples of developmental success rather than philosophies that may or may not be grounded in fact.

## **Why Beijing, Warsaw, and Abu Dhabi have the answers**

Government finance is a complex phenomenon. Not only does it support the typical financial and accounting questions of governments as institutions, very large ones, it must deal with monetary and capital market functions. The latter is a particularly challenging task in the current environment, as securities issues easily span borders and create international effects, some benign, others the result of purposive manipulation by corporate actors and investors.

Governance in a dual control environment introduces important elements and opportunities with regard to the management of financial issues on a national level. These factors introduce opportunities for improved worldwide financial governance. Dual control, the simultaneous support for knowledge-based and authoritative policies, supports improved legitimacy in two ways. First, it makes networked functionality more feasible and efficient. In this way, it allows for a more dependable and secure technological environment. Second, it reinforces governmental mission in the knowledgeable wielding



of power. This is to say that legitimacy of this kind is earned by carrying out what is expected by the people that matter. In the case of governments, governments of all kinds, this is ultimately the people being governed. They need to know that coherent policies are being carried out that reflect their best interests and that protect them.

### **Nostra culpa, but not in the way you would expect**

Viewed from the perspectives of 1979 for China and 1989 for Poland, Western markets and institutions looked like bright, shining citadels of success. There was nothing to be done but to jump in with both feet to embrace the markets and engage in integrative efforts as they presented themselves. Of course, much of what we have learned, and a great deal of our successes in the interim, has proven out these perceptions. For this, we perceive that there are high levels of gratitude.

As documented earlier, problems persist.

As also documented, China and Poland are not newcomers to the issues of governance and finance. Benefiting from thousands of years of experience, having enjoyed the longest uninterrupted statehood on the part of China and an admirable record of cultural persistence on the part of Poland, the two countries have something to share. This is guidance as to how sustained economic and political affairs can be conducted. The last couple of centuries have been characterized by turmoil and upheavals, partly attributable to geopolitical factors, but also resulting from philosophies and concepts that had not shown to be valid through the test of time.

### **Millenia of obsession with trust and process**

There are as many definitions of democracy as there are philosophers. One scholar particularly noted in this field is Robert Dahl, who makes reference to a “process-oriented approach to democracy” based on effective participation, voting equality, enlightened understanding, control of the agenda, and inclusion of adults.<sup>207</sup> Another, Charles Tilly, makes reference to democracy as collective “networks of trust”.<sup>208</sup> This is a good working definition for our purposes.

### **Ironically, we have the answer to putting knowledge in its place**

Most scientific knowledge is generated in the United States, this is true. This is due to many decades of commitment to education, to science and technology. There is concern that the American educational system is not keeping up with the rigors and requirements of scientific endeavor. That being the case, the United States remains the hotspot, even if that means that much of the work is carried out by immigrant scientists that have demonstrated intelligence and superior preparation.

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207 Dahl, R. A. 1998/2000. *On democracy*. New Haven CT: Yale University Press, 37-38.

208 Tilly, C. 2007. *Democracy*. Cambridge, MA: Cambridge University Press, 80-91.

Using knowledge, the product of scientific effort, is a social effort, and in that regard, the United States has failed miserably. This can be seen in the failings in governance and finance documented and cited here.

## **Specific areas requiring global commitment**

Beijing-Warsaw Consensus demonstrates its potential for establishment of a more effective global governance environment. Such a model, explicitly leveraging technology to support simultaneous carrying out of knowledge-driven and authoritative policies can serve as the basis for finance and economics that exhibit both flexibility and rigidity as needed. China's Organic Law and the historic importance of consultation in Chinese development and politics has been dismissed prematurely in the international discourse. This is a misunderstanding that prevents policymakers from leveraging the knowledge of millenia.

This is an area where China, Poland, and the Emirates can educate the world. China has the longest history of governance on record. Historically, Poland presents an unusual case history in concern for the fine points of governance stemming from the culture and preferences of the Poles and the interesting geopolitical conditions faced by Poland. With social and political systems that have lasted for hundreds of years while supporting multiple, the Middle East has a historic tradition of integrating religion and governance. Among other examples is the millet system that was effective for long periods of time in the Levant and Turkey. In spite of hostile governing traditions, many of the people who grew up with these traditions continue to maintain them.

## **Accountability at last**

Finance in the current environment is driven by monetary economics. The key policy environment is driven by a basket of policies most commonly referred to as the "Washington Consensus (WC)," a combination of tight fiscal and monetary controls coupled with limited regulatory activism, privatization generally, and pluralistic, democratic political groundings. The WC is considered to be a prerequisite for the Beijing-Warsaw Consensus from the standpoint of finance and governance.

Regardless of political and social preferences generally, under this approach great effort is taken to ensure that competitive elections of government leaders among the general populace are carried out and that political and legal institutions exist that support if not ensure that the will of the people is carried out and that their individual rights are protected.

Talcott Parsons provided guidance on matters of integration and accountability on a global level.

The organization of the United Nations (and I refer to the League of Nations as well) may be viewed as an extension of a trend with deep historical roots. The central characteristic of this trend is the attempt to establish consensus at the procedural level. That is, the institutionalization of procedures is considered the focal growing point of systems of order

at the level of norms, a feature which is shared both by legal systems, in the more technical sense, and by political systems. This is not to say that the common observance of general procedural norms will inevitably obviate conflicts as to standards of fairness, or those which refer to opportunity or methods of treatment of the case. Of course, such a procedural system undercuts the absolutism of commitment of goals by introducing problems attendant to settle or compromise. However, there are different kinds of compromise. For our purposes, the important type is the promotion of integration, in terms of higher normative level.

Of course, in part, procedural systems also enable coercive sanctions to enforce their norms. But coercive sanctions constitute only one component of the sanction system and our crucial concern here does not involve the identification of specific sanctions. Rather, I wish to underscore a more basic issue, namely, the acceptance of procedural obligations.<sup>209</sup>

Of course, there is a natural reaction to the idea of coercion, but the ultimate question is to the legitimacy of the process, or of the procedure. The point of dual control is a matching of procedure with consistent, credible data gathering, with the result that context can be established and appropriate action identified as determined by the appropriate experts and authorities. It is indeed coercion that serves the public good when combating corruption, ignorance, and arrogance.

## Permanescence and governance

It is possible that the thought of tighter levels of governance make people uncomfortable. Indeed, there are many who take the position that the best government is an ineffective one, if not an inattentive one. There are those that consider the matter with regard to the size of government – indicating that small is better than big, for example – similar to the strong state/weak state issue. Such thinking is in harmony with Washington Consensus/liberal markets programs. To retreat from the irrationality of mankind, all barriers to openness should be removed so that markets can reach states of equilibrium. The governments of nation-states should thus be minimized as to their impact. Stiglitz, from his then-position of lead economist of the World Bank, pointed out the overwhelming probabilities against such a possibility that markets, particularly capital markets, will thus achieve some natural balance, he led out a chorus of economists from the periphery, armed with a stunning level of competence and analytical rigor.<sup>210</sup>

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209 Parsons, T. 1962. "Polarization of the world and international order." In Q. Wright, W. M. Evan, and M. Deutsch (Eds.), 1962, *Preventing World War III: Some proposals*. New York: Simon & Schuster. Also in Parsons, T. (Ed.). 1967. *Sociological theory and modern society*. New York: The Free Press, 479.

210 Dent, C. M., Dosch, J. (Eds.). 2012. *The Asia-Pacific, regionalism, and the global system*. Cheltenham, UK: Edward Elgar Publishing Limited; Büchi, E. 2008. *La transformación económica de Chile: El modelo del progreso*. Santiago, Chile: El Mercurio Aguilar; Santiso, Ffrench-Davis, R. (Ed.). 2006. *Seeking growth under financial volatility*. New York: Palgrave Macmillan; Aydin, Ffrench-Davis, R. (Ed.). 2005. *Reforming Latin America's economies: After market fundamentalism*. New York: Palgrave Macmillan; Kim, E. M. 1998. *The four Asian tigers: Economic development and the global political economy*. San Diego, CA: Academic Press.

The information problem is at the core of this issue. Related to this is the “impossibility theorem” of Kenneth Arrow. As reported by Amartya Sen, this is a “deal killer” when it comes to rational economic development, rendered even more challenging when it comes to individual choice. As it turns out, however, Arrow was not a pessimist, but a realist.

Indeed, the spirit of “impossibility” is not, I believe, the right way of seeing Arrow's “impossibility theorem.” Arrow provides a general approach to thinking about social decisions based on individual conditions, and his theorem – and a class of other results established after is pioneering work – show that what is possible and what is not may turn crucially on what information is taken into effective account in making social decisions. Indeed, through informational broadening, it is possible to have coherent and consistent criteria for social and economic assessment. The “social choice” literature (as this field of analytical exploration is called), which has resulted from Arrow's pioneering move, is as much a world of possibility as of conditional impossibilities.<sup>211</sup>

Permanescence is this solution, this form of broadening.<sup>212</sup> Permanescence occurs when someone that really knows what he or she is doing, an unquestioned expert, expresses that knowledge in a usable form for others to easily and naturally use when needed. From the time permanescence has been achieved, the issue at hand, problem in question is resolved according to the best available knowledge on earth.

Before we get into the question of whether this can be achieved (it can by means of dual control and fluidity, by the way), we should consider the implications of permanescence. First of all, this would have a devastating effect on much of commerce, as there is a lot of money being made based on ignorance. This is one of the very points made by Schumpeter and others as to capitalism's weaknesses – but it is not just capitalism that is at fault with regard to knowledge and its use and misuse. As we have indicated, cooperativist enterprises similarly harbor knowledge, increasingly more with success and time, as is the case with all of enterprise. Under such conditions, what passed for knowledge at one time becomes “anti-knowledge” later on. One American physician, for example, recently pointed out – *and not in a critical way* – that his profession has been holding on to outdated medical concepts in one case regarding cancer for almost two hundred years.<sup>213</sup>

This is a battle that must fought, a war that must be won. If, indeed, rational thought and action is what is required for our prosperity and security – individually, severally, and collectively – and more conclusive, credible sources of information are necessary for this to occur, this challenge is indeed the “tip of the sword” in our fight for life.<sup>214</sup>

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211 Sen, A. 1999. *Development as freedom*. New York: Anchor Books/Random House, 253.

212 Tingey, K. B. 2015. *The solution: Permanescence*. Logan, UT: Profundities LLC.

213 Brawley, O. W. 2011. *How we do harm: A doctor breaks ranks about being sick in America*. New York: St. Martin's Press, 237.

214 Tingey, K. B., and Manicki, M. 2015. *Rational war: The fabric of society, dual control and legitimacy, and the big*

For the last two hundred years, thought leaders in the West and in the East have sought for the answer. Capitalism has drawn explorers and entrepreneurs to the ends of the earth to address a fundamental imbalance that occurs when production and capital are separated. As Schumpeter so firmly pronounced, this act of separation creates an inherent imbalance that generates a series of events that ensures the ultimate destruction of the very conditions that allowed it to happen in the first place.<sup>215</sup> The thing is, the point has not been clearly made as to what capitalism is, dodging the issue by making the case that it is enterprise, or trade, or even innovation. It is none of those things. There is the point that if you accept someone else's money to engage in such activities, you can do more of them. There is the parallel point that if you do take that money, you will have to do more of them, given that you have now “fed the beast” that will ultimately take over your plans. This has much to do with why Mathew Boulton was desperate in 1793 for the emperor and China to buy his “trinkets”. He and his partners had shareholders to worry about.

Capitalism is held to be “cool”. What we have just described is “not cool”. We believe that enterprise, and trade, and innovation are “cool”. We wish to retain that conception while providing persuasive argument as to how global governance and finance can adapt to the fact of capitalism's limitations – once we are all clear as to what capitalism really is.

Marx was of the opinion that this separation of production from money would ultimately undermine itself, naturally becoming socialistic and communal. As just mentioned, Schumpeter agreed with the first assertion, that capitalism ultimately decays, not necessarily with the second, that it naturally changes to socialism. According to Marx, although inevitable, such a transformation would nonetheless require revolution. Capitalism and even feudalism would need to be basically “stamped out” over an extended period, essentially by means of a *permanent* revolution. This could be taken as a lack of faith in the dialectic model on his part, by the way.

Later, when it became possible to take over Russia after WWI, many communists pointed out that since the country had not advanced from feudalism to capitalism generally, it might be better to leave the country to its own devices, waiting for the industrialized countries to crumble and fall. The Bolsheviks went for the “low-lying fruit” and took over the country. In the process, they enjoyed their position of power to promulgate additional concepts which justified their cause and to deal with challenges brought on by the economic and political mismatch they faced. For one thing, they entertained a sophisticated and spirited economic development debate, extending over several years.<sup>216</sup> Leon Trotsky loomed large in these interactions.<sup>217</sup> One of his observations was that many countries represented

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zipper. Logan, UT/Warsaw, Poland: CIMH Global.

215 Schumpeter, J. A. 1942/1950b. *Can capitalism survive?* New York: Harper & Row, Publishers.

216 Gregory, P. R., and Stuart, R. C. 1981. Chapter 4: The Soviet industrialization debate (1924-1928). In P. R. Gregory and R. C. Stuart, *Soviet economic structure and performance* (2<sup>nd</sup> ed.). New York: Harper & Row; Gusev, K., and Naumov, V. 1976. *The USSR: A short history*. Moscow: Progress Publishers, 138-139, 147, 154-182.

217 Schumpeter, 1942/1950b, 41-43.

various stages of development at one time. From this came what became known as the “politics of combined and uneven development”. All countries see this to a degree. In some, the variations are pronounced. These developments matured into a combination of philosophies and programs that defined relations among countries in Soviet times and since. This was a means of justifying involvement where the actual pattern of development did not match the “dialectic” Marx had outlined. This was also a means of justifying permanent revolution, which largely defined international relations between East and West during the Cold War.<sup>218</sup>

Why do we consider these issues of war and revolution in such a benign section, where information and knowledge are under discussion? It is this: The information and knowledge problem *causes* the cycle problem. The whole magic of entrepreneurial renewal, of replacing old, stodgy, corrupt, and socially repugnant corporations with shiny, new, technologically-savvy and environmentally-friendly enterprises by means of market-based competition is dependent on openness and access to be sure, but its *lifeblood* is in the availability of information and knowledge for the use of all, especially the populace.

Rationality depends on real knowledge and information, not the shadows of these that result from market-based perversions. Rationality depends upon permanence. Permanence can only be provided by government – by *governments*, really. There is no way to predict where the Beethoven's of our economic future will reside. There is a good reason to believe that it will be where public education is good, where there is a good deal of investment in science and advanced education, and where human and industrial levels are high. Exceptions to this abound, but even where this is the case, there is something of a migratory trend, that such individuals will tend to go to where they can best achieve their goals. One the other hand, from a governance and finance standpoint, there will be a free rider problem with regard to knowledge and its expression and use through fluidity and dual control.

This, though, is the battle to be won as to the long term prosperity and stability of the people. Each new idea is revolutionary. By embedding credible information into society to act as a counterweight to the naturally deceptive messages of the market, society has a change to embrace newer and better alternatives, resulting in the flow of resources and cash to new market entrants. This will serve as a check on the older firms and bring those equilibrium conditions that everyone is hoping for. Cycles will still exist, but they will be felt sooner, they will be less painful, and they will lead naturally to improved conditions. The battle will be a permanent one, as there will always be attempts by market participants to bring the government under control – to corrupt the system such that permanence does not occur.

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218 Löwy, M.

## Capacity, cooperation, and currency (the 3 C's)

The “Three C's” of context, cooperation, currency are a simple listing of issues relative to the requirements of dual control financial systems on a national level. This is particularly useful in the development of plans with highly cohesive groups. The first of these, *capacity*, considers the need to provide an environment in which successful economic prospects can be understood, where plans can be put together that will match available skills and resources with opportunity for both domestic and international success. The second, *cooperation*, considers conditions under which permanent productive relationships can be maintained. The third, *currency*, considers value, its maintenance and use on a national and regional scale, leveraging the effects of the other two kinds of activity.

## The Beijing-Warsaw-Abu Dhabi model

The BWA model knits together the old and the new. History has taught that society matters, particular the close-knit relationships of families, clans, and communities. Corporate relationships have proven to be effective in the aggregation of capital. They also have shown to be useful in bringing together the efforts of many in support of mutual objectives, an ongoing challenge.

Neither form of organization has proven very effective when dealing with new knowledge. Successful corporations have the resources to hire qualified scientists and analysts, but such organizations rarely look at new knowledge favorably that may call into question their current products and services. Cooperative communities tend to be conservative generally. They tend to think of the needs of the community rather than of new innovations. Seldom would they choose innovation as presented by outsiders when there are members with other opinions.

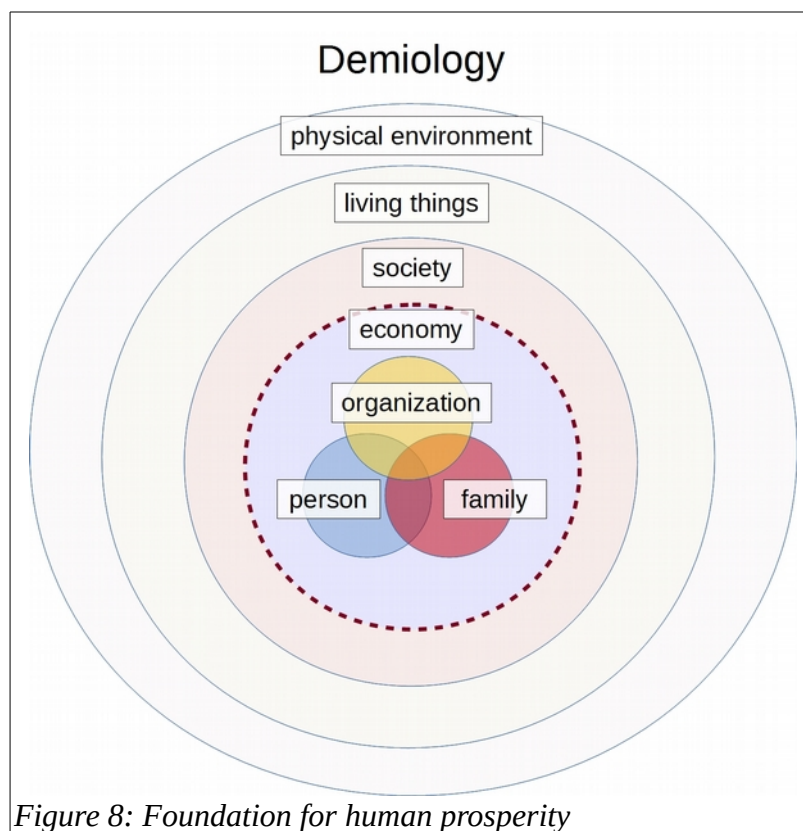
Thus, in order to engaged in effective development efforts, governments must take on the role of knowledge innovator and arbiter of science and new technology. The BWA model makes use of a basic, simple knowledge model, based on trees, to accomplish this task. The point is the make use of the benefits of cooperative enterprise models to maximize the leverage of knowledge. This is to include knowledge of many things, but principally scientific knowledge and policy development. The principal social model to be considered is a unified structure in which social science is nested within the physical sciences, a means of building on root causes of social as well as physical phenomena.

## Well-being of the people as the goal

As considered earlier, the nested model for the understanding of human prosperity is referred to as demiology. This is based on the Greek root “dem,” meaning “people.” Emanating from families and organized as groups in a variety of ways, people establish societal norms to meet their individual and collective needs. As seen in *Figure 8: Foundation for human prosperity*, there are nested relationships between the physical environment, the domain of living things, society, the economic system that has

been created, and relationships among people, their families, and organizations that people have created for various purposes, both public and private.

At its center, the demiology model shows relationships between individual persons, their families, and organizations that have been established to meet various needs of individuals, families, and social, economic, and political subsets of the population. This simplistic representation masks the complexity of such relationships. The point, however is not in their complexity, but in how they are fundamentally grounded. Organizations represent formal and informal associations, including the wide array of social, legal, economic, and political institutions. These include governments. Outside of the three interrelated sub-circles is a dotted red line representing the economy. The economy is an artificial construct, a subset of society, which is represented in the larger circle yet. The economy represents transactional aspects and concepts of ownership and fair use. Traditionally, what exists within the social circle represents social science, a separate construct from physical science. The demiology model makes no such distinction.



*Figure 8: Foundation for human prosperity*

The fundamental question with respect to demiology with respect to a consensus on governance and finance is the position of the dotted red line, the extent of the economy. The point is to establish economic groundings that take into account all of science, all of nature. We look at the various policy



sets as represented by Parts I, II, and III of this report, along with the Appendixes, with regard to this task, which is central to both balance and prosperity in the long term.

## Cooperative approaches to prosperity

Past efforts at governance proved consistent and established balanced relationships with nature that does not exist now. There is no going back; even though the people of China, Poland, and Emirates, and other countries of the world may have continued on as before without Western influences, both military and economic, the people have now tasted modernity and enjoy what it brings. The old order would be impossible, if not undesirable to attempt to recreate. Nonetheless, Confucian, Islamic, and other traditional principles underlying the old orders continue to provide guidance and groundings to the people and to policy. They point to models and policies that could bring balance and prosperity on a global scale. The unified concept of demiology supports unity and balance in all things, which may provide further aid in the establishment of balance and harmony to society in the long term.

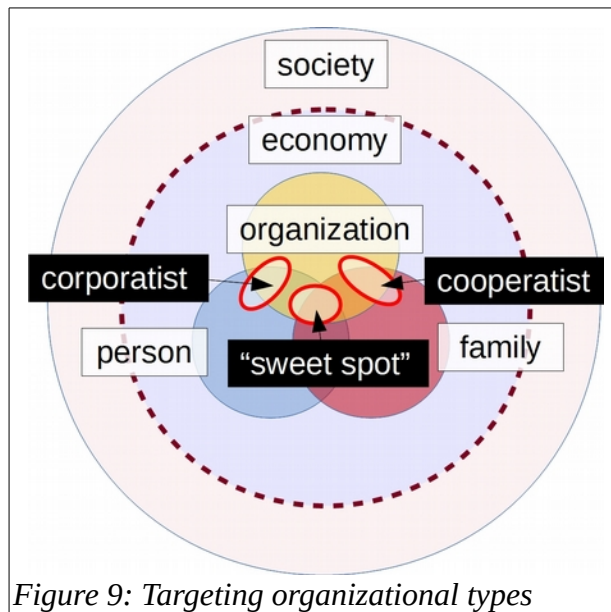


Figure 9: Targeting organizational types

In *Figure 9: Targeting organizational types*, we see overlapping relationships between individual persons, organizations, and families. Overlapping relations can be seen. Of course, absent a form of estrangement, which does occur, persons and their families have relationships. Even in cases of estrangement, there can be passionate aspects to the relationship. There are also other factors that run the gamut from social to political, economic, religious, and psychological. These can be the most powerful of all interpersonal bonds.

A person can have a relationship with an organization. Depending on the organization and the nature of the relationship, this may be strong or weak. It may or may not involve strong emotion. It may or may

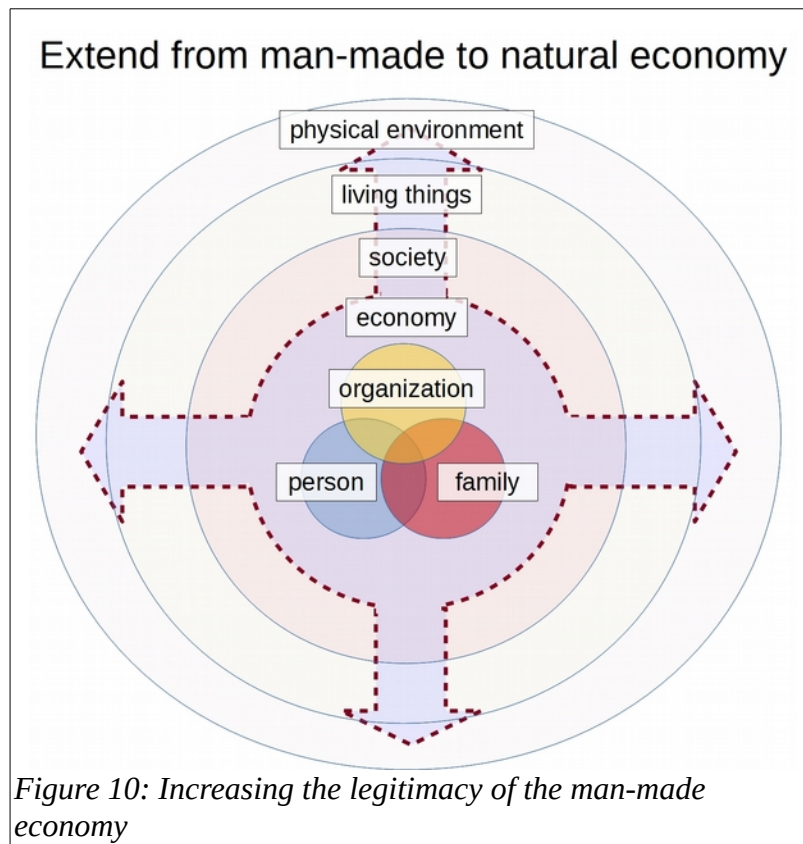
not entail either economic, political, social, belief, or convenience aspects. By the same token, families may have relationships with organizations outside of relationships any of the individuals might have.

With the “sweet spot” label, a condition may exist where the individuals, their families, and organizations have relationships together. This represents a powerful set of relationships. It does not necessarily connote leadership or governance. Indeed, all members of a family may work together under oppressive conditions. If ownership is a factor, this represents a family business. If political and legal command is represented, this represents a monarchy. The main point of the Consensus is a plan that incorporates these factors in its development efforts is that much stronger. Such relationships, we believe the histories and the traditions indicate, provide powerful motivations for stability – on *not*, if they are ignored.

### **Bridging from the man-made to the natural economy**

As indicated, stability is to be achieved by bringing the artificial, man-made economy to correspond with the essence of nature. In this way, all aspects of economic effort will be improved in the long run, although there will likely be big adjustments in the process. As indicated earlier, many products and services that are being offered currently – in all sectors – are based on either outmoded offerings given the current state of human knowledge or purposive programs to obscure and ignore better ways of doing things. This is where permanence enters into the equation, where government supports a methodical means of discovering and then leveraging the best available knowledge, expressed directly in available technology.

*Figure 10: Increasing the legitimacy of the man-made economy* shows arrows extending the economic sphere out beyond society and living things to the level of the physical environment. Ideally, this would extend to the more core elements of the physical environment in order to bring economic phenomena in line with natural reality. Such an approach brings the work of scientists and experienced practitioners in all fields to center stage. Indeed, society thus demonstrates a commitment to and trust in such individuals and their networks of practice and their sponsoring institutions. The legitimacy of such activities is important. This is in contrast with a much looser framework in which economic and social activity is carried out irrespective of such knowledge. This introduces errors of commission and omission that introduce risks of their own and preclude actions that could serve to leverage natural processes.



It is important to note that prosperity does not depend on the exploitation of ignorance. Although the economy is subject to painful adjustments when improved products and services come to market and win out in fair competitive markets, adjustments can occur and social factors can be restored as new products and services are offered. The key question is whether people buy them. Food-related markets provide a good example of this. There is a trend that as people prosper, a smaller proportion of their budgets apply to food. The very poor may spend 80% of their disposable income – and a considerable amount of work – to obtain the food they need to survive. The very rich may spend a small fraction of their disposable incomes on food, which ironically will have been a much higher amount of money and next to no effort.

If subsistence was a factor, the money paid by the poor for their food would contribute far more to the substance of the economy than the expenditures of the rich. This is clearly not the case, as the rich, through their much higher expenditures would be contributing to the prospects of many others. The question is not whether consumers *have* to pay the money, but whether they are *willing* to.

Let's use energy as an example. Let's assume that by virtue of permanence, energy that does not pollute becomes free. Perhaps there is a scientist with this knowledge whose work is being kept secret. Once the knowledge is "out", there is an opportunity for someone to exploit, as even a free resource

can be marketed or provided at some cost. Of course, margins have a tendency to be higher in new markets. In some ways, existing providers would have advantages over competitors just starting out. In other way, they may be the most unlikely providers, for psychological, social, or physical reasons.

For the most part, the existing providers would collapse – at least their cash flows from that business would go away, as outlined in Appendix D. Depending on whether the organizations and people in question had been wise money managers, they may be in crisis conditions. If they had been wise, they would at least have time on their hands. In any event, a government would be better off helping the people out than trying to prop up the old businesses indefinitely.

The overriding question is whether the organizations or people in question can get others to part with their money for something that they have to offer. The prospects may be bleak, but the good news is that the products and services in question would not have to be mind-bendingly profound or even important. There would simply need to be transactions under which some product or service was traded for something with monetary value. Of course, we are not talking about anything illegal in this case – although that would be another reason for government to support the adjustment plans for people and organizations thus caught in a whipsaw of progress in this way. If permanescence, the understanding and mastery of the knowledge of nature, brought us to an economy comprised of 99% wants and 1% needs, with waste similarly extinguished, we would be better off than we are now. Well, socially, we would have interesting problems, but they could be mitigated through social, religious, and educational means.

## Pragmatic economic governance

*Figure 11: Deploying policy under workable conditions* demonstrates one aspect of improving on the validity of the economy with respect to the realities of nature. In this, we make reference to more of the politics of the possible, or possibilism, as described by Albert Hirschman than the various economic and political philosophies inherited from prior times.<sup>219</sup>

Such philosophies were representative of perspectives and points of analysis of historical merit, but devoid of perspective and data that we now enjoy. Interestingly, the work of economists on the periphery that provide guidance as to how the bridge to a more relevant form of economics can be established. The false dichotomy of core and periphery is an important example of this. Such a concept is not now and never was sustainable, at least as it relates to finance.<sup>220</sup>

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219 Hirschman, A. O. 2013. Political economics and possibilism. In J. Adelman, *The essential Hirschman*. Princeton, NJ: Princeton University Press, 1-34.

220 Ellerman, D. 2008. *Helping people help themselves: From the World Bank to an alternative philosophy of development assistance*. Ann Arbor, MI: The University of Michigan Press; Hoogvelt, A. 1997/2001. *Globalization and the postcolonial world: The new political economy of development* (2<sup>nd</sup> ed.). Baltimore, MD: The Johns Hopkins University Press.

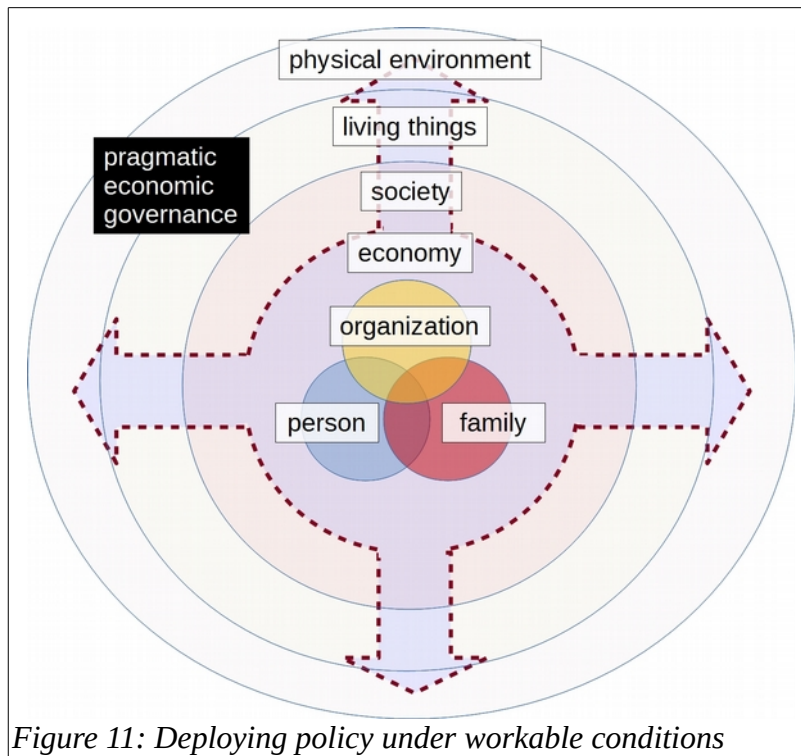


Figure 11: Deploying policy under workable conditions

Surely, the questions of stability and balance must be resolved before global capital market openness is acceptable. Lessons have been learned on this score in Latin America – most particularly Chile, in China, East Asia, Turkey, and elsewhere. Poland similarly learned to protect itself from wide market swings during the Great Recession of 2008 in particular.

### Chinese commitment to moral administration

When faced with the imperative to adjust to the West during the period of humiliation, it did not take Chinese thought leaders long to realize that they did not want to assimilate all of what the West had to offer. Beginning with the famous “Dissenting Views from a Hut Near Bin”, Feng Guifen published thoughts that mirror current concerns. There was shame in the need to adapt to obvious superiority of the West in terms of education, economic development, political legitimacy, and intellectual inquiry, but he encouraged China to use those areas to reinforce strengths elsewhere.

Feng's political philosophy, however, can hardly be called democratic. It was closer to what we might today call “participatory authoritarianism.” After all, he still conceived of political authority as flowing from the emperor, the Son of Heaven downward. In the end, like generations of reformers who followed him, Feng concluded that Western democracy was not suitable for China. In addition he remained confident in the superiority of Chinese values and Confucian principles. Yes, China would have to learn “techniques for wealth and

power” from the West, but its social fabric moral code, and cultural forms would, and should, remain intact. They were, after all, nonpareil.<sup>221</sup>

Socialism with Chinese characteristics augments this long tradition with modern experience in administration and consultation.<sup>222</sup> As can be seen in *Figure 12: Applying the wisdom of the ages*, such considerations as provided China with stability and balance through the ages can support this effort to bring the economy more in line with social and natural realities.

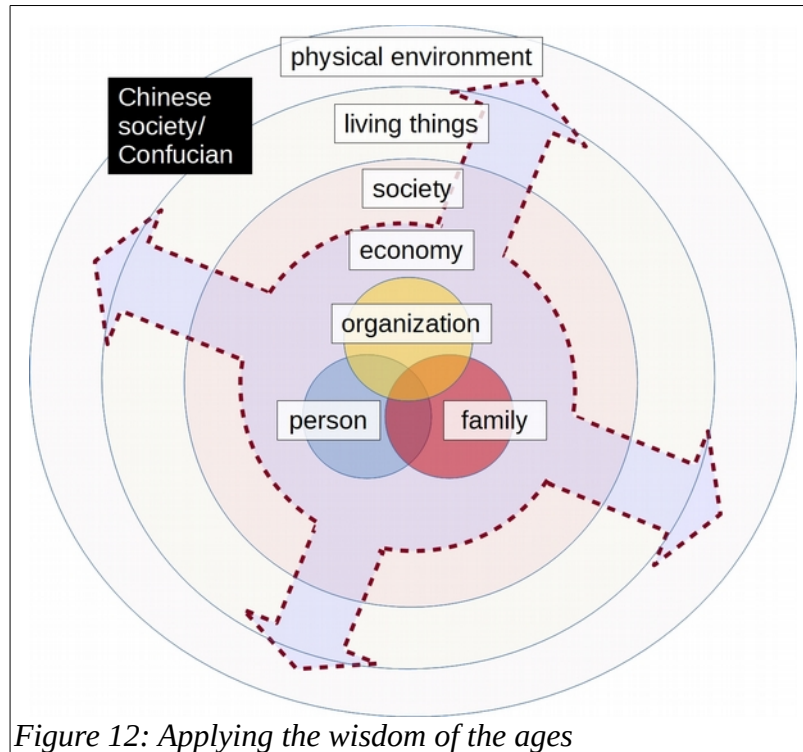


Figure 12: Applying the wisdom of the ages

Similar benefits can be achieved through related approaches using Islamic and other traditions that have supported stability over time.

## Islam and responsible development

Islamic insistence on process is surely derived, at least in part, from life in a harsh, unforgiving environment. Finding water in the desert is not like a walk in the park. In understanding and following the pathway in a very literal sense bridges social and environmental phenomena. The insistence on basing behavior on proven norms is a unique and important aspect of dual control and fluidity. This is a

221 Schell, O., and Drury, J. 2013. *Wealth and power: China's long march to the 21<sup>st</sup> century*. New York: Random House, 53.

222 General Affairs Office of CPPCC. 2004. *The Chinese People's Political Consultative Conference*. Beijing: Foreign Languages Press.

central aspect of Islam.<sup>223</sup> There is great promise in leveraging technologies in important social and political ways in conformance with such traditions.

This is not going to grow out of Western, capitalist sources. This is not an opinion, nor it is a criticism. This is a widely-known phenomenon, widely acknowledged and commented on.<sup>224</sup>

A full taxonomy of the “new economy” would include a much longer list of characteristics, some of which we have already touched on; for example, those relating to business organization; the virtual firm replacing the traditional company enterprise; micro-entrepreneurial; constant re-engineering and innovation; and many more. To my knowledge, a proper theoretical “model” of the “new economy” that sets out the logical relationships between its various technological, institutional, cultural, organizational, and macroeconomic aspects has yet to be written.<sup>225</sup>

Capitalism is “out of gas”. This was also predicted mid century by none other than Frederic Hayek and Joseph Schumpeter, two highly-regarded economists and social scientists.<sup>226</sup> Ironically, some of Professor Hayek's work was used to justify the policies of “Reaganism”, which can realistically be called “raw capitalism”. Realistically, the Reagan/Thatcher revolution of the 1980s leveraged the title of one of Professor Hayek's books, “The Road to Serfdom” without really reading it or others of his works.<sup>227</sup>

Similar to Schumpeter, Hayek believed that details mattered. As to Hayek, it was the detailed understanding and support of economic model that mattered – those that led to equilibrium, that sainted state in which supply and demand and information and price all reach a state of balance and harmony. His main point is that for an equilibrium to come about, there must be perfect information that is available to all of the parties in question. Certainly an equilibrium will not happen if one side has more information than the other, or more credible information, etc., and an incentive to take advantage of that imbalance. Since such a condition of perfect information in Hayek's estimation could not be counted on to exist, the second-best alternative needed to be applied: Allow for open markets and hope for the best.<sup>228</sup> The last thing that was needed was to have government controls based on regulations that were arbitrarily or ignorantly applied, which would open the door to corruption as well as great

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223 Davutoğlu, 1994.

224 Foroohar, R. 2016 May 23. Saving capitalism. *Time*, 187(19): 26-32; El-Erian, M. A. 2016. *The only game in town: Central banks, instability and avoiding the next collapse*. New York: Random House; Eichengreen, B. 2015. *Hall of mirrors*. Oxford, UK: Oxford University Press.

225 Hoogvelt, A. 1997/2001. *Globalization and the postcolonial world: The new political economy of development* (2<sup>nd</sup> ed.). Baltimore, MD: The Johns Hopkins University Press, 112.

226 Schumpeter, J. A. 1942/1950. *Capitalism, socialism, and democracy*. New York: HarperPerennial.

227 Hayek, F., Caldwell, B. (Ed.). 1944.2007. *The road to serfdom. The collected works of F. A. Hayek, vol. ii*. Chicago: University of Chicago Press, 28-29.

228 Kirzner, I. M. 1992. Chapter 8: Prices, the communication of knowledge and the discovery process. In Kirzner, *The meaning of market process: Essays in the development of modern Austrian economics*. London: Routledge, 139-151.

imbalances. This is all the political conservatives heard him say, which they interpreted as being a call for “small government”.

Of course, Hayek knew that this wouldn't work, not for very long. The same was true of Schumpeter, who was very pessimistic as to the long-term prospects for capitalism for this and related reasons. They were both acquainted with and concerned about the teachings of John Maynard Keynes, whose writings and teachings “won the day” in that era. It can be said that the current poor prospects for the brand of capitalism that that brought commercialism to its knees resulted from broad application of Keynes' suggestions. Hayek and Schumpeter saw this coming and predicted it. Hayek talked with Keynes himself about it. Keynes told him that if he saw the problems surface, he would immediately go public and correct the problem, this just weeks before his death.<sup>229</sup>

Hayek and Schumpeter were concerned because Keynes wrote that economic policy did not require detailed knowledge of the processes of society, nor those of the economy. His approach was to simply “add up the numbers” and use logical inference to evaluate them. This is called dealing with “economic aggregates”. Being a mathematician, Keynes encouraged the development of mathematical models based on his definitions of income and expenditure, savings and investment at a macro, or country, level. With the advent of computing, a huge industry has emerged in tracking such totals, then associating them with economic activity in a rhetorically-acceptable way. A knowledge of the details, of individual processes, was not held to be important or beneficial according to this approach. In fact, Keynes regularly made fun of such efforts, labeling them as being wastes of time.

This concern on the part of Hayek and Schumpeter was enhanced by Keynes' ultimate proposition, which was clearly in harmony with the first. This was that when the economy got into trouble, governments could get out of trouble by “stimulating demand”, which was a code phrase for spending money. Clearly, this was the elixir, the medicine, that politicians were looking for and it made Keynes very popular. When Schumpeter first saw it in print, he elected to not publish a book he had written on the subject because he could see that Keynes had already won the day by giving the politicians what they wanted to hear.<sup>230</sup>

Professor Schumpeter was concerned about economic policy as was Professor Hayek, but he was also concerned by natural and non-economic social policies. He was as much a social and political scientist as he was an economist, and he was concerned that problems of society would not be resolved without rational, informed processes put in place to achieve them. He was an astute student of economic cycles and had published much on the long-term effects of policy. He emphasized that there were several layers of cycle, each functioning within its parent layer. Some had to do with short-term conditions,

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229 Hayek, F., Caldwell, B. (Ed.). 1995. *Contra Keynes and Cambridge. The collected works of F. A. Hayek, vol. ix.* Chicago: University of Chicago Press.

230 Schumpeter, J. A. 2008/2014. *Treatise on money.* Aalten, The Netherlands: WordBridge Publishing.



others were shaped by product life cycles and other artifacts of the market. The key cyclical pattern, however, was the longest of them all, a half-century economic roller coaster named after a Russian economist named Kondratieff that represents the capitalist cycle of boom and bust.<sup>231</sup>

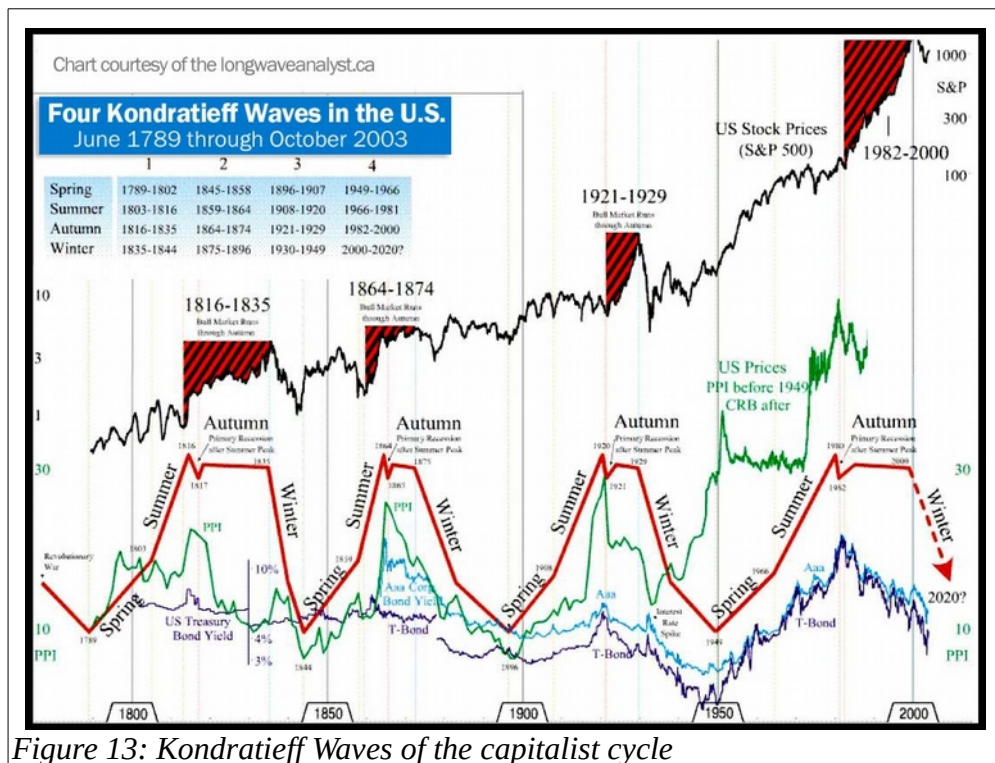
This long cycle has nothing to do with natural phenomena, other than that mankind is a product of nature. It has nothing to do with the norms and desires of society other than that it reflects the psychological weaknesses and foibles of people as they experience greed, hubris, and despair.

Before entering into an anti-Western and an anti-commerce debate, we need to remind ourselves of what capitalism is, which has nothing to do with commerce *per se*, other than it is one form of commerce. Our current dilemma is that this one form of commerce has dominated all others. Despite its long-documented weaknesses, the capitalist form of commerce has pushed society – indeed, civilization – to the brink. This is exhibited in the Kondratieff cycle, particularly when fueled by the half-baked philosophy behind Keynes-inspired policies. As can be seen in *Figure 13: Kondratieff Waves of the capitalist cycle*, the United States has experienced four Kondratieff cycles in its 200+ year history. Roughly fifty years in duration, we can see the last one being stretched out in large part – even based on a 2003 analysis, before the Great Recession. This stretching can be looked at from a “post” Keynesian viewpoint. Outsized government expenditures can be seen to disrupt the normal behavior of the cycle. Indeed, more than one economist has described current conditions as exhibiting “zombie-like” features.

From this standpoint, what is “out of gas” is a system characterized by the analysis of aggregate statistics that have no direct, rational ties to natural or to social processes. Under such conditions, fiscal stimulus – the mere printing and distribution of money – ceases to take effect. The point is, things need to be done that make sense. Things that do not make sense need to be corrected. Mankind needs to enter into a new cycle, one that is both rational and stable. It would be nice to initiate one that would last more than fifty years, all things being equal.

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231 Schumpeter, J. A. 1939/1964. *Business cycles: A theoretical, historical, and statistical analysis of the capitalist process*. Philadelphia, PA: Porcupine Press.



This being the case, what else is there besides “naked” capitalism? We need to invent a model to provide a more sustainable form of commerce that will not kill initiative, but that will couch commercial activities in the contexts of nature as well as desired societal patterns and conditions. This would be a form of commerce that is respectful of such prerequisite conditions and one that is irrefutably committed to due process in carrying them out. It would be nice, if possible, to not be experimental in this. If there are traditions to be leaned on, that would be good. If there are examples of success, this would also be good.

It will come as a very big surprise to many to find that this is what Islam is. More precisely, we should say that this is what the infrastructure, the scaffolding of Islam is. Truly, there are the religious underpinnings, the Koran and the teachings of the Prophet (PBUH). These are not optional with regard to Muslim adherents, but they provide a model, long established, for mutual co-existence, prosperity, and respect. The millet system under the Ottoman Empire was a very good example of this. Under that system, many cultures, ethnic groups, and religions co-existed for centuries as documented earlier.

Toby Hellerstein, who lived in Syria (of all places to be considering an example of peace, given the instability of the place currently), describes an environment of peaceful coexistence that would be beneficial anywhere in the world:

In fact, the way in which Syria was governed reinforced the autonomy of these distinct ethnic and religious communities. The Ottomans enforced a policy of pluralism, intended to

appease different nations and quell the rise of nationalist movements, in which Jews, Christians and Muslims were all empowered to assert their own identities and therefore had no need to vie for power. Each religious community, known as a "millet," had a representative in Istanbul and was allowed to organize its own affairs, including its people's education, social services and charities and even some of the legal standards by which they lived. The millet controlled all internal disputes such as marriage, divorce, inheritance, and the distribution and collection of taxes. The residue of this community-specific system remained in modern Syria; for example, everyone knew you went to the Armenian quarter to get your silver.<sup>232</sup>

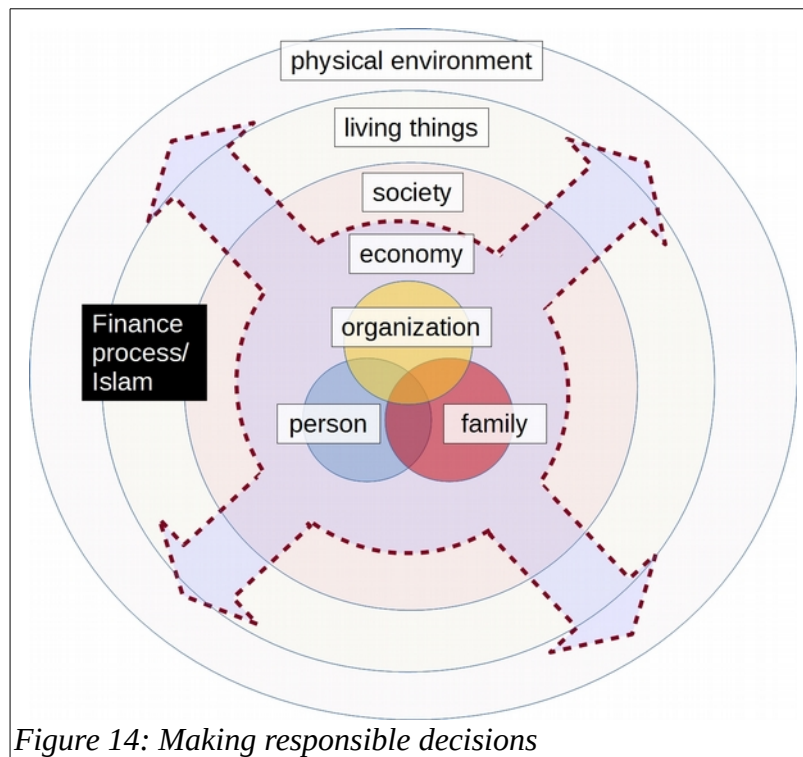
Interestingly, in this we can see that a commercial model is in force, but a different one than an aggressive form of capitalism. It seems that the Armenians in question were sharing their knowledge of silver with their customers – resulting in long-term relationships.

Should everyone become Muslims, then? Now, wouldn't that be nice – but there are many religions and movements appealing for our membership and support. They all need due respect, meaning that their traditions and customs are to be honored *to the degree that they are socially and legally legitimate*. That sounds like a very challenging prospect, but there clearly need to be means of evaluating the actions and outcomes of all in our challenged, crowded world. Society needs to establish effective norms to accomplish this, including self-policing. *Fluidity and dual control provide frameworks for this*. Once established, such norms and practices need to be supported and protected. Islamic history provides many examples of this. There are obvious exceptions.

Imbalances result from actions taken that may make sense within the logic of the man-made economy but which conflict with the realities of nature, or even deeply-held societal norms. *Figure 14: Making responsible decisions* provides an example of this more expansive view of the economy's potential to society. Whether specific projects are carried out to conform with accepted laws and practices, as Islam requires with regard to Islamic teaching, or whether other traditions are followed following stepwise processes that are guided in this way, the concepts of balance and continuity must be systematically supported.

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232 Hellerstein, T. 2016, March 6. *What modern Syria can learn From the Ottomans*. Austin, TX: Stratfor.



The Middle East suffers from great turmoil. We believe that this is in large part due to the current clash of civilizations. Everyone, of course, wants to convert all else to their ways. This is definitely the case with Westerners, who have used economic and military force for this purpose. The same can be said for Marxists with their commitment to perpetual revolution, which extended to all of the continents. Such a goal is embedded within Islam as well as Christianity. It does not look like this kind of mass transformation is going to occur. Those same ethnicities, belief systems, and cultural patterns that capitalism seemed bound and determined to marginalize – as was the case with Stalinism – are destined to persist. Continuing with the description of peaceful coexistence in Syria by Ms. Hellerstein:

After centuries of Ottoman rule, Syria emerged from World War I in an entirely new form. Under the Ottomans, the area known today as Syria hadn't been a single entity but rather a collection of "wilayats," or provinces, that at times included areas of modern-day Lebanon and Israel. Nor was the population homogenous. The wilayats of Ottoman Syria each comprised an array of ethnicities, cultural identifications and economic structures. After 400 years of rule under the Ottomans, certain particularities of the political system became ingrained. In modern-day Syria before the civil war, cities were divided into culturally distinct quarters: One where you would find the Armenians, another populated by Assyrians. I especially remember the Kurdish markets, where vendors would come dressed in their bright colors to sell fruits and vegetables from the countryside.<sup>233</sup>

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233 Ibid.

It is refreshing here to be considering “centuries” of peace and continuity. Society is well-served by programs to legitimately extend the cycles of society and of prosperity.

As we search for lowest common denominators, people ought to be able to “agree to disagree” on a few things, but establish consensus on others. In a pragmatic, possibilist way, we should be able to extend the willingness to accept that people think, believe, and feel in different ways, but that their organized traditions, the processes of their lives, should also be honored. The fundamental point is in the need to find a cure to Islam's ills. Is it a restoration to the glories of prior time, to a caliphate and a unification? These are big questions that are beyond the scope of our proposal at this time. Codification of the major Sharia traditions by means of dual control and fluidity, integrating such with other estimable aspects of science, governance, and culture, these could surely help.

Having established traditions in the Middle East that have brought sustained peace and prosperity among diverse groups and cultures, it is interesting to see current efforts to extend cooperative programs to our times. The theme of the Dubai *Expo 2020* program, “Connecting Minds, Creating the Future” is clearly in line with this, along with the themes of sustainability, mobility, and opportunity.<sup>234</sup> The extended theme of the Expo, “Partnerships for Global Innovation and Sustainable Development” takes on a new light in the context of the BWA Consensus, which provides scaffolding for a new development model in line with the traditions of the Middle East, as well as that of China and Central Europe.

## Fluidity of knowledge for everyday use

The 20<sup>th</sup> century was a time of great scientific discovery, but limited use of that knowledge. Most of the efforts in physics, the foundation of it all, went to military purpose, co-opted with much of the rest of the time and energy of the period. True, there are applications of the new physics in the development of electronics, but applications to energy, health, and the environment are scandalously scarce. Much of what passes for high technology and science is perfunctory application of Newtonian principles.

*Figure 15: Fluidity of knowledge for dual control*, extending to applications of physical science, calls to mind the possibilities for great information-gathering observatories. Associated with these would be interpretive algorithms designed to interpret phenomena from the quantum on up, including measures from the physical realm through to the environmental, biological and epidemiological.<sup>235</sup> Indeed, this is in part the genesis of demiology, given that epidemiology is the study of what goes on the surface of people, or just above.

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234 Al Hashimy, R. (Forward). 2013. *Connecting minds: Creating the future*. Dubai, UAE: Touchline.

235 Tingey, K. B. and Manicki, M. 2015. *Quantum epidemiology: Leveraging the data-driven health tradition*. Logan, UT/Warsaw, Poland: CIMH Global.

The natural economy of which we speak carries on its functions in ways that are known as well as some that are foreign to our understanding. Information processing is steeped in thermodynamics as well as chemistry. Fortunately, everywhere is found rationality, or at least consistency – if not probability. By erasing the pretended barrier between physics and society, we can pick away at the discontinuities. With permanence as the goal, there are significant opportunities to brink the human economy and the natural economy in sync.

This is an area of obvious global scope. Given the overwhelming advantage in scientific discovery in the United States and Northern Europe, efforts to achieve fluidity of knowledge by countries of what has traditionally been the economic periphery will be an anomaly. Such a situation will provide opportunities for collaboration and negotiation with institutions in all parts of the world.

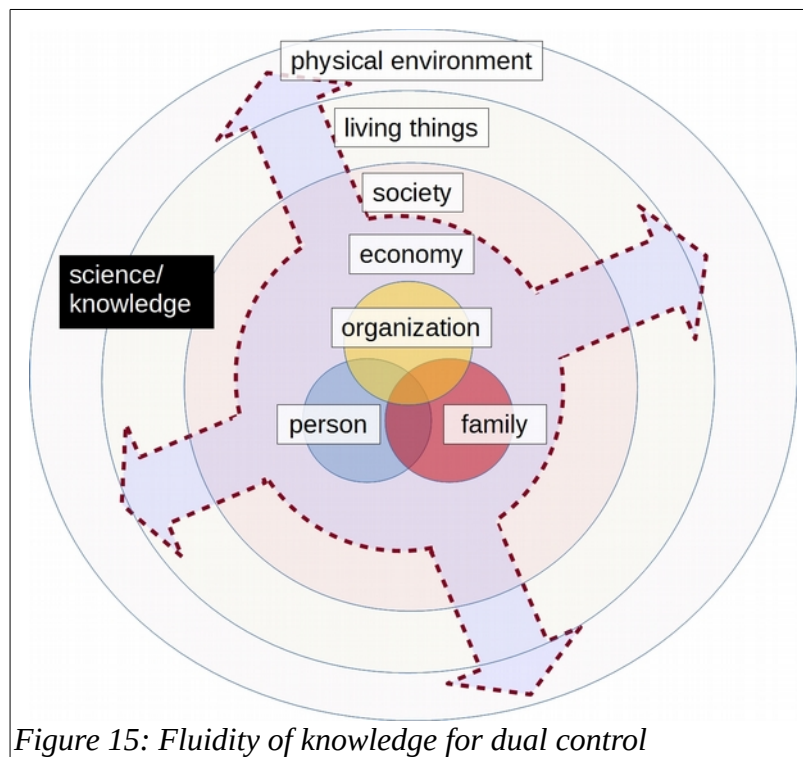


Figure 15: Fluidity of knowledge for dual control

## Polish and Middle Eastern models for political balance

Trust does not come easy for the Poles. Well it would not, considering the history. Similarly, Poles require confirmation of things that others would take for granted. Admirable performance by members of the Polish diaspora throughout the world are testament to the commitment and persistence that are endemic to the Polish culture.

In the early modern period, the Poles failed spectacularly to build an efficient centralized state structure and they paid the price, being swallowed up by their more successful

neighbors. The history of Poland has therefore, up until now, been written as that of a failed state. Like some distorting lens or filter, that failure colored and deformed the historian's view of the whole of Polish history.

He is no longer, as he was only a couple of decades ago, writing the history of an enslaved and to all intents and purposes non-existent country. There is a great difference between writing up a bankrupt business and writing up one that has been through hard times and turned the corner. He is no longer writing the history of a state that failed, but of a society that created a social and political civilization of its own, one which was occluded by the success of a rival mode (now utterly discredited) but whose ideals are close to those the world values today.<sup>236</sup>

United Arab Emirates has much in common with Poland. Both countries are on the crossroads between East and West.

Dubai demonstrates how world-class infrastructure makes the difference between a convenient crossroads and a global hub. Indeed, “Dubai” no longer appears like a singular place anymore but rather is shorthand for an entire connected country for which it is the commercial and demographic center. Dubai, Sharjah, and Ajman are now effectively one expanding urban cluster, while Abu Dhabi's oil-fueled expansion has funded urban growth ever closer toward Jebel Ali, which has become a Dubai satellite city and the final stop on its elevated, driverless metro rail.<sup>237</sup>

The point is in the establishment of a new cycle, one that will endure, better than before. The point of a program in support of natural, social, and economic factors in that order is that commerce is and can be sustainable. It is unbridled, untrammelled capitalism that is the problem. As documented by Schumpeter, the distinction between providing products and services and making money is critical. Making money for money's sake forces extremes in profit-taking that always goes too far. Furthermore, the separation causes a sense of malaise that takes the joy out of the process.

The capitalist process, by substituting a mere parcel of shares for the walls of and the machines in a factory, takes the life out of the idea of property. It loosens the grip that once was so strong – the grip in the sense of the legal right and the actual ability to do as one pleases with one's own; the grip also in the sense that the holder of the title loses the will to fight, economically, physically, politically for “his” factory and his control over it, to die if necessary on its steps. And this evaporation of what we may term the material substance of property – its visible and touchable reality – affects not only the attitude of holders but also that of the workmen and of the public in general. Dematerialized, defunctionalized, and absentee ownership does not impress and call forth moral allegiance as the *vita form* of

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236 Zamoyski, A. 2009/2014. *Poland: A history*. New York: Hippocrene Books, xxi-xxii.

237 Khanna, P. 2016. *Connectography: Mapping the future of global civilization*. New York: Random House, 263.

property did. Eventually there will be nobody left who really cares to stand for it – nobody within and nobody without the precincts of the big concerns.<sup>238</sup>

This capitalistic process, fixated on nothing more than profit, finds itself fighting more and more over less and less, on top of the demoralization. There is overproduction. There is underconsumption. Individually, there is risk with regard to the essentials – not the wants, but the needs. Capitalism took away the foundations of this in a “sleight of hand”.

...without protection by some non-bourgeois group, the bourgeoisie is politically helpless and unable not only to lead its nation but even to take care of its particular class interest. Which amounts to saying that it needs a master.

But the capitalist process, both by its economic mechanics and by its psycho-sociological effects, did away with this protecting master or ... never gave him, or a substitute for him, a chance to develop. ... Capitalism evolution eliminates not only the king *Dei Gratia* but also the political entrenchments that, had they proved tenable, would have been formed by the village and the craft guild. Of course, neither organization was tenable in the precise shape in which capitalism found it. But capitalist policies wrought destruction much beyond what was unavoidable. They attacked the artisan in reservations in which he could have survived for an indefinite time. They forced upon the peasant all the blessings of early liberalism – the free and unsheltered holding and all the individualistic rope he needed in order to hand himself.

In breaking down the pre-capitalist framework of society, capitalism thus broke not only barriers that impeded its progress but also flying buttresses that prevented its collapse.<sup>239</sup>

The post-2008 frame of reference from the point of view of the periphery – of which the BWA Consensus participants are a part – is substantially different from this frame of reference. There are many political and policy influences in China, Poland and the UAE, but nothing like those faced in the regimes of the core. Are policymakers in the core aware of the problem from this frame of reference? Probably not. The late-stage effects of capitalism have made the discussion impossible. When the parties think that they are discussing commerce, the sustainable and nutritive provision of goods and services, they are really discussing financial capitalism, the merciless grasping for excess profits.

If they were aware of the problem, could policymakers do something about it? Within the framework of the capitalist argument, couched within the Keynesian governance model, there is little to be done. Existing markets are to be sacrosanct; details are to be avoided. The only policy tool available is the checkbook, or more rightly said, the printing press. There is a second policy, of course – to export the problem and its effects to the periphery. That is not likely to work – again.

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238 Schumpeter, J. A. 1942/1976. *Can capitalism survive? Creative destruction and the future of the global economy*. New York: HarperPerennial, 154.

239 Schumpeter, 1942/1950, 138-139.



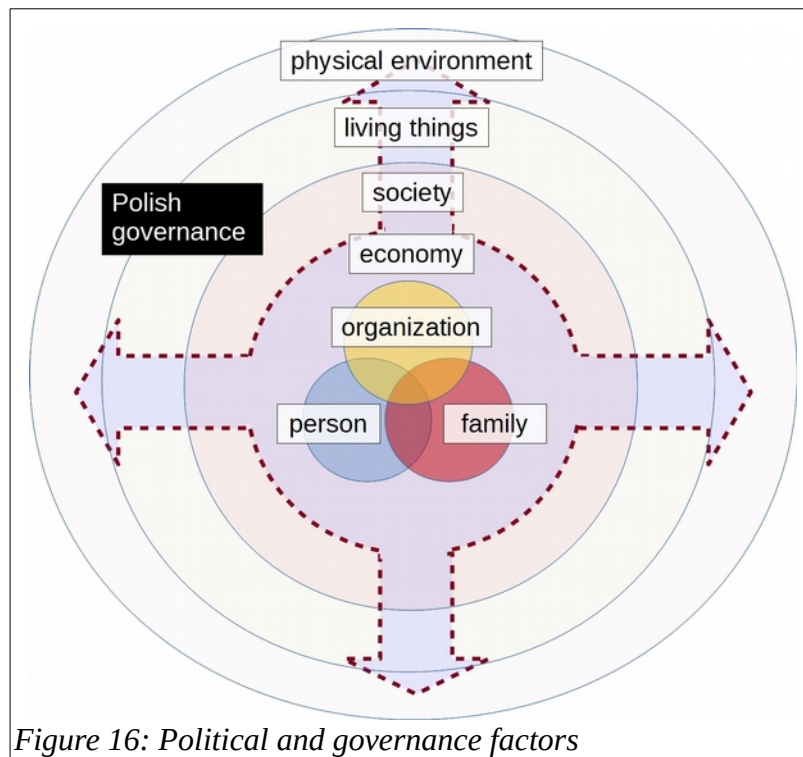


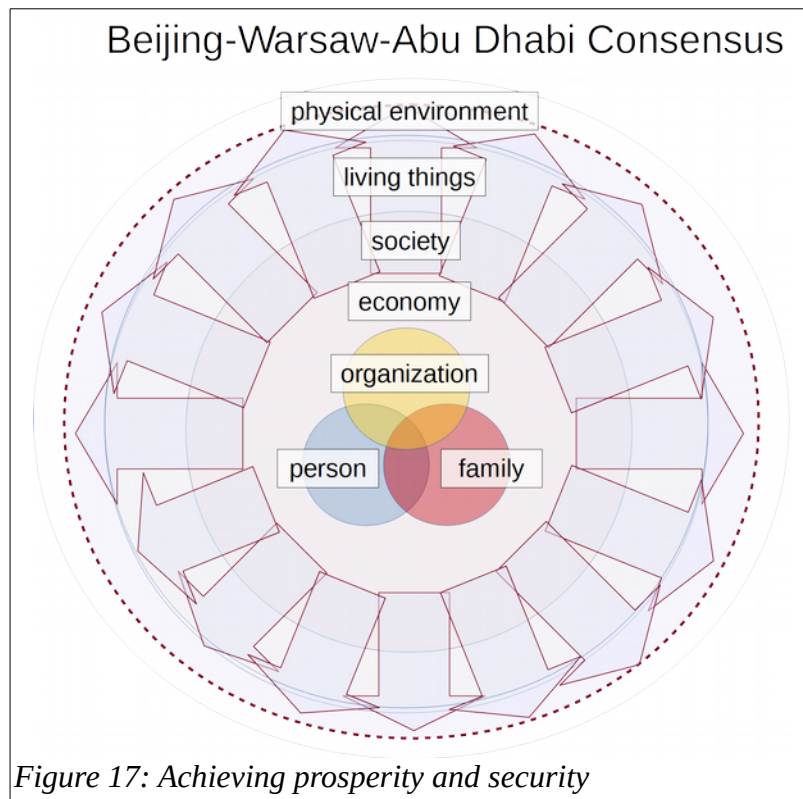
Figure 16: Political and governance factors

As seen in *Figure 16: Political and governance factors*, these two countries, with their independent governance patterns and their tenacity in forging self-directed paths, set themselves of as unique partners with China in the development of governance and collaborative models needed by society.

## Fruits of a socio-economic consensus

Pushing the boundary of the economic system to the limits of natural science will be a monumental human accomplishment. It will not occur without significant commitment of time, including that of the most highly-valued of scientists, practitioners, and experts. To accomplish this, a high degree of collaboration and contribution will be required of leaders and authorities in social, religious, and political sectors.

As mentioned earlier, this will not involve one core-periphery model, but many. Coupled with the fluidity that grants the system legitimacy, such an arrangements leverages Web 4.0 capabilities to achieve Finance 4.0. *Figure 17: Achieving prosperity and security* outlines this structure.



Having achieved such objectives in governance and finance, extension of these capabilities will be possible in other fields. This can be particularly beneficial in fields associated with the environment. Opportunities exist in social, health, and human services environments. Indeed, by resolving the information problem, a consensus of this kind to serve the role of saving capitalism, if not market-driven, liberal economic philosophies.

## Additional desirable elements in a governance and finance model

### 1. Historically sound social and economic models

The lessons of history indicate that emphasis of clans and families is warranted on the one hand; knowledge networks on the other. Programs are to be designed to promote cooperativist programs and organization, particularly where sponsored by families and communities.

### 2. Credible data and processes

This can be significantly enhanced from independent data collection observatories at all levels of science and knowledge-driven decision networks.

### **3. Groundings for development consensus**

There is no question but that economic measures as imposed upon the countries of the world as a part of the postwar development model have proven effective in the establishment of credible, authoritative systems and establish the underpinnings for responsible fiscal governance. Providing developmental assistance with strings attached has shown time and again to be good medicine, in all regions and in all

### **4. Astute [management] of “market process”**

Such approaches have been based on gross over-reliance on the faith of markets generally. The invisible hand doctrine, falsely attributed to Adam Smith, blinds the eye to

### **5. Mutually-beneficial collaboration with corporatist entities**

In the fog of market expectations, the temptation is to spend money on “proven” providers and suppliers. This tilts the table in favor of existing entities, many of them multinationals. In such cases, locals note a troubling tendency in development programs to support existing market arrangements to the detriment of local opportunities. Perhaps this problem is less evident than in the earlier stages of postwar reconstruction, but it is persistent nonetheless.

### **6. Responsiveness to scientific and environmental developments**

This is to be accomplished on a global level, considering scientific knowledge to be part of the global commons.

### **7. Responsiveness to needs of individual ethnic and social communities**

Ethnic and social processes are to receive priority attention in the design and maintenance of systems. Learning and using expressive knowledge models and forms is to be a priority activity.

### **8. Awareness and policy of effects of cyclicity in markets and institutions**

Analysis of data is to be explicitly designed to evaluate stage of development, not only of individual market cycles, but of organizational development, growth, maturity, and decline.

## Appendix A – PCISKM historical tables

In the following review, the Influence model is presented as a series of letters with varying levels of emphasis in each venue and period. The stronger the emphasis, the more that kind of actor showed more influence. The string of actors, if they all had high levels of influence, would look like this: **PCISKM**. If they all had minimal influence, they would look like this: **PCISKM**. In the following tables, the last column includes qualitative observations of relative influences as contained in the cited literature.

### Governance actors and Western history

Governance actors and Western history <sup>240</sup>				
Time	Era	Governance	Private life	Influence
to 3500 BCE	World: Hunter-gatherer to cultivation	Family, farming subsistence, communities	Freedom, but hazardous; end of leisure with establishment of farming communities	<b>PCISKM</b>
3500 BCE-1600 BCE	Sumerian	Highly organized political and financial system <sup>241</sup>	Advanced urban development, little or no concept of private life, except there was a tradition of debt forgiveness <sup>242</sup>	<b>PCISKM</b>
4000 BCE-300 BCE	Egyptian	Highly organized political system	Little or no concept of private life outside of royalty, bureaucracy, and military	<b>PCISKM</b>
3000 BCE-330	Greek	Conception of the ideal; democracy and authoritarianism	Much thought and some innovation; many kinds of states, exemplified by the Sparta vs Athens dichotomy, more of a dominant state vs democracy, but both mostly slaves	<b>PCISKM</b>
27 BCE-800	Rome	Brutal reality and oppression; civic man; slavery involved people and emotion, but dangerous; government by cooptation into the elite; no modern concept of corruption, every function a “racket”; 230 perceptible tax increases	Urban, Greek culture, manhandled by Romans; dignity was the objective, nothing to do with virtue, but an aristocratic ideal of glory; virtue and leisure were equivalent; nonetheless, the object was patrimony, to expand on family wealth; land repository of wealth, but commodities for speculation	<b>PCISKM</b>

240 Mostly from P. Ariès and G. Duby (Eds.). 1987-1991. *A history of private life*, Five Volumes. Cambridge, MA: The Belknap Press of Harvard University Press.

241 Advanced credit arrangements were established long before currencies were developed and used. See , Graeber, D. 2011/2012. *Debt: The first 5,000 years*. Brooklyn, NY: Melville House, 39.

242 Graeber, 65.

Governance actors and Western history				
Time	Era	Governance	Private life	Influence
900-1100	Byzantium	From civic man to inward man; increased importance of the Church; power to king and soldiers, who pillaged for private use; provisional partnership perpetuated by victory; king's omnipotence only tempered by assassination	Conquest of private over public; laws memorized by designated specialists called <i>rachimburgs</i> ; the law, unpredictable and terrifying; law based on place of origin; little notion of the common good; promising young boys raised by the king, the <i>nutriti</i> , or "fed ones"; love subservient to survivability; distancing from the environment; kinship groups called <i>parentela</i>	PCISKM
1000-1400	W Europe: Medieval	Competition to govern; public to do with shared, in view; private to do with not shared, unseen, even secret; public "immune from being bartered in the marketplace"; decreasing camaraderie among the nobles; knights transferred to noble household; In Italy, marriages "affairs of state"; large aristocratic households, French paterfamilias, entirely dominated by men, based on power, security, and perpetuation;	Realism and more art; public of the festivals, private of the daily and more homely; common people appealed to the Church for familial protection; communal living in the great feudal households; extending friendships through generosity; only marriage between lord and lady; much promiscuity; Italy, sons able to marry; some concept of the individual with time, but solitary man considered dangerous; only minimum of two persons travel, with temporary "familial" bond; antithesis of private was foreign	PCISKM
1500-1800	W Europe: Renaissance	Monarchies, but dissipating control; king's life fully public, modest folk life exclusively private; introduction of concept of state; religious reformation; widespread literacy	Precarious intimacy, more personal; king's court high, urban lower class/peasantry low; intermediate zone, people of culture; writing and silent reading refined potential for privacy; sacrifice family relations for public service or revolutionary causes	PCISKM
late 1700s-early 1900s	W Europe: Revolution to Great War	Reflections on the mechanisms of power and search for the means to resist; knowledge of aristocratic private lives resulted in their overthrow; arms length governance	Privacy surfaces generally; unstable boundaries between public and private; unprecedented individual legal rights; family synonymous with privacy; antagonism between workplace and home (haven of peace vs constraints of public life); desperate effort to stabilize the boundary between public and private by mooring it to the family, with the father as sovereign	PCISKM

Governance actors and Western history				
Time	Era	Governance	Private life	Influence
early 1900s-1990s	W Europe: Modern times	Public experimentation with many programs; severing family from business and beginning of professional management; separation of finance from management; in totalitarian realm, privacy is compromised, but creates more secrets; Public conformism is rewarded	Rise of wage labor stripped the family of its economic function along with public education and state-funded social security, also many employment-related social benefits; specialization of working and living spaces; depersonalization of work	PCISKM
850–1385	Poland: Piast	Prince Miesko, effective warrior and diplomat, also sophisticated fiscal system; his son Boleslaw I expanded kingdom, but expanded faster than could be maintained; did establish reputation, economic development, 80 castle towns, currency, and trade routes; five duchies and decentralized; Jews with royal protection; great wealth generally; little central authority, more backward, but greater freedom; had to regain control from Prussian and German groups, esp the Teutonic order of knights; consolidated laws in Statutes of Piotrków and Wislica, other reforms	Adopted Western Christianity in 956; relations with Germany, Denmark, Vatican, Sweden, England, and Caliphate of Córdoba in Spain; Catholic Church important to all aspects of life, although pagan worship persisted; low population density, invited Jews, Bohemians, and Germans; no feudal orders; three-tiered society, szlachta (position and land), wloodyki (land), and panosze (yeoman/labor); cities separate; higher social cohesion than Europe generally; Suffered from Tatar incursions, esp. 1241; very favorable weather, economic, and health conditions in the 14 <sup>th</sup> century	PCIS M
1385-1572	Poland: Jagiellonian	Combined with Lithuania in marriage of Jadwig and Jogaila of Lithuania (Jagiello); 1388 new coinage; Battle of Grunwald/ Tannenberg, eventual defeat of Teutonic order; ruled 1/3 of European mainland, all but Poland lost within 100 years; Parliamentary government/Sejm of szlachta very active, basis for government legitimacy, selecting successor kings; pointless international entanglements weakened the monarchy, but	Sophisticated noble democracy; the szlachta very powerful, suspicious of strong king; 1430 <i>Neminem captivabimus isi iure victum</i> equivalent to habeus corpus; powerful legislative bodies; 1505 <i>Nihi novi</i> , king must work through two chambers of parliament; rights of szlachta not extend to wloodyki and panosze, who were constrained by them legally and economically; szlachta spendthrifts and showy, but the bishops became wealthy; urban development and mining wealth; great advancement through Jagiellon University	PCIS M

Governance actors and Western history				
Time	Era	Governance	Private life	Influence
1572-1648	Poland: Early elective monarchy	Strong aristocracy; ambivalent king Zygmunt Augustus; codification of laws in 1578 through “executionist” movement; control power of churches; magnates had become very rich and powerful “writing their own checks” with government resources, but only minor reform; political deal to combine Lithuanian monarchy with Polish republic; 1573, 40,000 szlachta in a field elected king over four days; opposite of centralized government; the result was chaos and unpredictability; beginning of three centuries of very powerful landed oligarchies	Much religious debate and many beliefs and institutions or religion; king “permit me to rule over the goats as well as the sheep”; unusually high tolerance for freedom for the times; Protestant Reformation did not take hold; Arian Christianity, although substantive, lost influence due to strict economic rules and pacifism; attempt to build “utopia on earth”; membership in szlachta equivalent to being citizen of Rome, including selecting king from among the group; time of great prosperity due to rising prices of agricultural goods worldwide; time of growth, education, and global sophistication; landless szlachta became increasingly impoverished	PCIS M
1648-1764	Poland: Deluge and decline	Devastating wars and weak political system; beginnings of republic, but stopped by neighboring powers; decentralization brought poor taxing systems and fiscal systems were very weak; nonetheless, the Poles under Jan Sobiesky routed the Turks at Vienna in 1683, to no earthly reward; all political and economic factors deteriorated with no apparent way out; szlachta increased usage of the veto out of desperation or to serve foreign interests	From the wars, famine, lack of productivity, and out-migration, the population fell by 25%, population in towns by 80%; underpinnings of industrial development were gone with the old towns; there was great show of culture and wealth; szlachta lived lives of unbridled prerogative; the dozen or so magnates – the oligarchies – were becoming more wealthy and powerful; peasants caught in poverty trap with theoretical rights only; Jews even worse off, resulting in Hasidism; people began to believe in anarchy and foreign countries would routinely ignore the borders	PCIS M
1764–1795	Poland: Three partitions	Polish-Lithuanian Commonwealth; last king appointed by Russia, establishment of first European constitution, but then partition by Russia, Prussia, and Austria; constitutional and other reforms; King aware and leading the way with highly nuanced plans and programs, but also high debts	Improved economy and population growth. Urbanization and progress in education, intellectual life, arts and sciences, and social and political systems. New modern culture a challenge to nobility, which turned to Russia for help in stopping democratization	PCIS M

Governance actors and Western history				
Time	Era	Governance	Private life	Influence
1795-1918	Poland: Partitioned	No Polish state, divided between Germany, Austria, and Russia; many resistance movements	Some personal benefits from the larger state; organic work ( <i>praca organiczna</i> ) significant efforts at educating the masses to increase economic potential, art, culture, an society	<b>PCISKM</b>
1918-1939	Poland: Second Republic	Springboard outcomes of WWI, leveraging political preparations dating to the 19 <sup>th</sup> century; Pilsudski and Paderewski lead in the organization of Poland with support of the Entente, or Allies; need to carve out border as well as constitution and government institutions; largest part 25%; Pilsudski executive powers; French Third Republic constitutional model; first election many parties, Pilsudski recused himself, then on sidelines, directing traffic; events become increasingly turbulent and combative; Republic ended with German invasion	After being ruled by others, very difficult for Poles at all levels to assume independence; integration required of four legal systems, six currencies, three railway networks, and three administrative and fiscal systems; ethnic parties with specific, conflicting agendas; Polish society, now based mostly on ethnic and language factors, was less accommodating of non-Poles; society was tumultuous, but less extreme than other European countries	<b>PCISKM</b>
1939-1945	Poland: Wartime survival	Devastating loss from invasion from Germany and Russia and lack of action by supposed allies; repositioning government in Paris; Massive underground operations carried out “with an efficiency and wit that sometimes obscure the difficulties and dangers involved” <sup>243</sup> ; historic military contribution, including people, equipment, transport, and intelligence	Polish people demonstrated undeniable bravery and competence; betrayal on all sides induced a sense of stoic isolation in most; many were killed; the fabric of society was seriously compromised; in many situations, military and otherwise, evidence of competence and confidence brought a strong sense of individual and collective pride	<b>PCISKM</b>
1945-1989	Poland: Soviet times	Highly centralized, cruel authoritarian system; potential nationalization of anything; murderous political purges into the 1950s; ultimate isolation and control by Stalin; policy leadership within the Soviet bloc; famous opposition events in 1947, 1956, 1968, 1970, and 1976 and many others	Brutal state, little personal or clan opportunity; return of millions of refugee Poles to homeland; ethnic persecution of Poles and Jews; feral day-to-day existence; secret relationships to help people survive and advance; internationalization within the Soviet bloc; academic opportunity within the state system.	<b>PCISKM</b>

243 Zamoyski, 321.



Governance actors and Western history				
Time	Era	Governance	Private life	Influence
after 1990	Poland: Third Polish Republic	Dissidence and subversion only common elements, making governance difficult; perception of unity quickly extinguished; Washington Consensus policies put in place; joined EU and NATO; but established independent programs from EU; conservative policies ironically implemented by Soviet-trained technocrats	More private opportunity, but not clan; Corporatist business opportunity and more internationalization; faith in market-based invisible hand	P O I S K M
1990s onward	Global, networks everywhere	Vast new establishment of institutions;	Conquest by private interests, but with questionable privacy. Dependence on liberal market philosophy. Commitment to scientific inquiry, but not to implementation (explicit knowledge, not expressive knowledge)	P O I S K M

## Governance actors and Eastern history

Looking at the model from the Western perspective can help to understand the international system in perspective. Similarly, looking at that model with regard to history of the East is similarly enlightening.

Governance actors and Eastern history <sup>244</sup>				
Time	Era	Governance	Private life	Influence
2200 BCE - 256 BCE	China: Shang, Xia, Zhou	Shang <sup>245</sup> 30 kings; vast manpower for public works; military change of governance, but high homogeneity and continuity	Post-and-beam construction, highly developed bronze metallurgy, pottery, other crafts; highly stratified society; Zhou in Wei Valley near Xi'an	PCIS KM
771-256 BCE [515] by 481 BCE 170 city-states	China: Eastern Zhou	Invoke mandate of heaven; governmental free-for-all	Cultural homogeneity, not like Middle East/Sumerian; assimilation through efficacy of way of life; Zhou moved east to Louyang	PCIS KM
403-221 BCE [182]; down to only seven states	China: Warring States	Rivalry and warfare/yearning for peace and order; military rulers and scholar-teachers; legitimacy through sanctioned violence	Integration with non-Chinese cultures; some importation, but with limited impact on society; Confucius, Mencius, and the “hundred schools” occurred, but with little influence	PCIS KM
221-206 BCE [15]	China: Qin	Unification, but rapid collapse with death of Shi Huangdi/First Emperor; emphasis on custom rather than education <sup>246</sup>	Savage reliance on punishment and force, <sup>247</sup> powers to the common people, who provided soldiers and tax revenues, standardization	PCIS KM
206 BCE – CE 8 [214]	China: Earlier Han	Sage-kings; educated gentlemen; governance by “officialism”; dynasty, slowly consolidating power; use of eunuchs to check power of empress dowager families	Emphasis on education and “sagehood”; influence of Confucius; criticism of Qin and custom as driving force for not honoring ritual and duty, rather punishments; Confucianism a control against wanton greed; Imperial Confucianism and Correlative Cosmology	PCIS KM
25-220 [195]	China: Later Han	Slow dynastic decline from weak emperors, families of wives, eunuch power mongering, factional rivalries	Ends with revolt of aristocratic families from the North, who assumed Chinese culture; Buddhism eclipses Confucianism	PCIS KM

244 Mostly from Fairbank, J. K. 1992. *China: A new history*. Cambridge, MA: The Belknap Press of Harvard University Press.

245 Originally only known through Zhou writings, but confirmed in the mid-20<sup>th</sup> century. Hessler, P. 2003, July. *The new story of China's ancient past*. Washington, DC: National Geographic Magazine.

246 Lewis, M. E. 2003. Custom and human nature in early China. *Philosophy East & West*, 53(3), 317.

247 Ibid.

Governance actors and Eastern history				
Time	Era	Governance	Private life	Influence
220-589 [369]	China: Period of North-South disunion	Three Kingdoms, brief unification, then Six Dynasties in the South and Sixteen Kingdoms in North	Nomadic people in North, Han Chinese in South; migration to warmer, more fertile areas of the Yangzi in the South	PCIS KM
386-535 [149]	China: Northern Wei	Assumed Chinese court system	Toba Turks; devotion to Buddhism, great stone carvings; appreciation of the connectedness of everything	PCIS KM
589-618 [29]	China: Sui	New legal code of 500 articles, establish control over local governments, re-institute traditional institutions	Northern, many agricultural innovations, “imperial Buddhism”, Peaceful assumption of power in South, great public works, failed to conquer Korea, then lost out to Tang	PCIS KM
618-907 [289]	China: Tang	Six ministries, personnel administration, finance, rites, army, justice, and public works (to persist to the 1900s), censorate to scrutinize and report on official and imperial conduct, early version of examination system began break from aristocratic system, Confucianism gradually invigorated to support strong state and control Buddhism, long decline to anarchy	Military conquests in all directions matched by fine arts and literature, open society, much trade, Silk Road, capitol Chang'an an international metropolis, example for all countries in East Asia, Buddhism an important independent cultural factor, Daoist church failed to take hold, but contributed to society through alchemy	PCIS KM
960-1125 [165]	China: Northern Song	Military coup converted to civil institutions, bureaucracy from examination graduates, centralization of revenues	Time of renaissance, technological invention, material production, political philosophy, government, and elite culture; much production and transport; steelmaking; capitol Kaifeng	PCIS KM
1127-1279 [152]	China: Southern Song	Conquest by Ruzhen invaders/Jin Dynasty; growth of finance and trade vehicles, including currency (paper money, an innovation), examinations less of a factor with increasing influence of families; traditional Confucian “wen” had looked down in military “wu” from Inner Asian tribes; susceptible to attack from grasslands; now they worked together “in balance”	Capitol Hangzhou; much growth in foreign trade; sea trade with Islamic diaspora; world leading nautical technology; paper and printed books; elite families averaged 140 years old; gentry society based on land and education; classical Confucian education paramount; Neo-Confucianism “keep the world materially and morally in order”	PCIS KM

Governance actors and Eastern history				
Time	Era	Governance	Private life	Influence
1279-1368 [89]	China: Yuan (Mongols)	Assimilation of concept of rule by foreigners; culmination of a thousand years of war; Mongol soldiers could not survive as farmers in peacetime; southern scholars recused themselves from supporting government; somewhat democratic succession	Much corruption; Manchus were not well-thought-of; Muslim financiers managed paper money; flourishing of Chinese drama and painting and private scholars; increasing importance of culture and increased isolation of emperor	PCISKM
1368-1644 [276]	China: Ming	Hongwu expel Mongols from China, fanatical central control; flood of admonitions and regulations; support peasantry and self-sufficiency to a fault; inherited nobility from military farmers; more wu/violence than wen/education and culture; emperor not delegate; government understaffed	Potential for global leadership, but turned inward; Neo-Confucian conservatism; apparent successes at the time probably led to catastrophic failures later; high degree of corruption; growth of international commerce; renewal frustrated by growing foreign influences	PCISKM
1644-1912 [268]	China: Qing “Pure” (Manchus)	Manchus got foot in the door without calling attention to themselves; Manchus were invited in as partners, took over; conquest of all of China took a generation; security in supporting orthodoxy and suppressing all else, especially local initiative	Highly nuanced imperial systems, with Confucian meritocratic bureaucratic elite, highly-praised, yet subjugated peasantry, and small, but adaptable merchant and trade classes; ample support for culture and the arts; late stage development dating to Song period, not innovative	PCISKM
1912-1949 [37]	China: The Republic of China	Weak state led to warlords to Japanese occupation to United Front	Attempt at authoritarian statism, loyalty and unity above all with cultural creativity and civil growth; from 1916 to 1927, warlords	PCISKM
1949-1979 [30]	China: Peoples Republic of China	Establishment of state based on United Front objectives and consultation	Strong state, with high levels of support from peasant class, which receives practical guidance	PCISKM
1979 - current [36]	China opening	Opening to foreign business arrangements, including manufacturing and capital markets; Modification of legal and economic framework to encourage entrepreneurship	Power and resources to state institutions and openings for private enterprise and urban manufacturing employment	PCISKM
622-661	Islam: Rashidun Caliphate	Mohammed for ten years until death, then the four “rightly guided” Caliphs, Abu Bakr [Sunni], Umar, Uthman ibn Affan, Ali ibn Abi Talib [Shia]; pax islamica, taxes and fees lower than before, standard Qu’ran published	624 Battle of Badr, 625 Battle of Uhid, 627, Battle of the Trench, 629-630 peaceful return to Mecca, rapid geographic growth, often with cooperation of Jews and Christians, Ali moved capitol to Kufa in Iraq	PCISKM

Governance actors and Eastern history				
Time	Era	Governance	Private life	Influence
661-750	Islam: Omayyad Caliphate	Wresting control through violence, Muawiya, a strong general and relative of Uthman, declared himself Caliph and later appointed son Yazid I Caliph, who purged Ali's son Yhsayn's family, resulting in a weakening caliphate, taxes raised and social payments to poor, including non-Muslims	Intrigue, but growth of the faith, separation of religion from politics, capitol moved to Damascus, then Medina; level of prosperity possibly at odds with Mohammed teachings; 5 <sup>th</sup> largest continuous empire in history	PCISKM
750-1258; 1261-1517	Islam: Abbasid Caliphate	Combination of Arab and Persian leadership, free-spiritedness with authoritarian legacy; social order based on agriculture dominated by large irrigation systems and trade; officials, merchants and <i>ulama</i> (scholars); moved capital to Baghdad, which became world's largest city; philosophy of Sharia codified; first Caliph Abd al-Abbis, then his son Mansur; first crusade 1096-1099; from 786, caliphs sons of slave concubines; caliphate crumbled, but <i>umma</i> (people) became self-sustaining in "trans-territorial autonomy"; Compete with supremacy with Fatimid Caliphate, north vs south; destroyed by Halagu Khan, under Genghis Khan, end of Golden Age	Development of algebra, sulfuric acid, manganese dioxide in glass, nitric acid, Baghdad House of Wisdom, wine, rose water, perfumes, naphtha/petroleum, alkali, caustic soda, glycerin, planetarium, calculation and numbering, pen and paper for calculation, calculating roots, sulfuric acid, cube equations, cartography, geometry, mechanical devices, body's circulatory system, scientific verification and measurement, alum, saltpeter, mathematical factorization, amicable numbers, decimals for algebraic and real numbers, calculating nth roots, symbols for numbers, astronomy and mathematics	PC SKM
1000-1200	Islam: Spread into India and North Africa	Non-Arab Muslims called mawali; Abbasids established that all Muslims of the same class; some growth through	Liberal approach to Christian and Jewish faiths, along with others; general openness and acceptance	
1200-1600	Islam: Spread of Islam in India and Indonesia	Early, 8 <sup>th</sup> century contact through Muslim traders, growth from conversion of rulers and royalty, marriage, and conquest; establishment of sultanates, mostly Sunni; help from Chinese Muslims and from the Ottoman Caliphate in the case of Indonesia	Limited evidence, but process began in west of archipelago, but slow and complex growth, solidarity with colonialism, which came later	PC SKM

Governance actors and Eastern history				
Time	Era	Governance	Private life	Influence
909-1171	Islam: Fatimid Caliphate – North Africa	Ábdullah al-Mahdi Billah, descendant of Mohammed daughter Fatima, used Hanafi jurisprudence, as most Sunnis; political leadership based on merit more than heredity; expansion in the South, also as far as Sicily and Southern Italy; ended with establishment of Ayyubid Sultanate of Egypt and Syria	Trade with Chinese Song Dynasty; tolerance with non-Muslims, including high office	PCISKM
1261-1517	Islam: Abbasid Caliphate - Cairo	“Shadow” caliph, supported by non-Arab army, the Turkish mamluks or slave-soldiers, loyal only to the government; technically mamluks couldn't be caliphs, but they were very aggressive militarily and politically and were “king-makers” all over Islam, also draining resources	Populace separate from governance	PCISKM
[756] 929-1031	Islam: Omayyad Caliphate - Córdoba	Founded by Emir Abd al-Rahman, who was an Omayyad and escaped from Abu el-Abbas; high degree of tolerance for and integration with Christian petty kingdoms in regions	Substantial irrigation works; significant center of high culture; Toledo was gateway of scholarly material to Western universities, including that of the Greeks	PCISKM
[1250] 1517-1924	Islam: Ottoman Caliphate	As sultanate, expand to Europe after 1389 Battle of Kosovo; absorbed Cairo mamluks in 1517, beginning of Caliphate under Suleiman the Magnificent; battled to the gates of Vienna and made alliance with Francis I of France against Holy Roman Empire; great power until end of WWI	Attempts at aviation; great territorial growth and combination with smaller sultanates; production and use of muskets and large canons	PC SKM
1804-1903	Islam: Sokoto Caliphate	In West Africa, founded by Usman dan Fodio, 30 emirates and 10 million people at its height; British abolished political authority of Caliphate, but allowed for ongoing Sultanate	2.5 million slaves captured and offered to become Muslims; After the Fulani War, all land in the empire was declared waqf or owned by the entire community. However, the Sultan allocated land to individuals or families, as could an emir. Such land could be inherited by family members but could not be sold. Exchange was based largely on monetized currency involving cowries or gold and silver coins. Major crops produced included cotton, indigo, kola and shea nuts, grain, rice, tobacco, and onion; Islamic scholarship held in high regard	PC SKM

Governance actors and Eastern history				
Time	Era	Governance	Private life	Influence
1919-1924	Islam: Khilafat Movement	<p>Ottoman emperor Abdul Hamid II (1876–1909) launched his Pan-Islamic program in a bid to protect the Ottoman empire from Western attack and dismemberment, and to crush the Westernizing democratic opposition at home. He sent an emissary, Jamaluddin Afghani, to India in the late 19th century. The cause of the Ottoman monarch evoked religious passion and sympathy amongst Indian Muslims. Being a Caliph, the Ottoman emperor was nominally the supreme religious and political leader of all Muslims across the world. However, this authority was never actually used. A large number of Muslim religious leaders began working to spread awareness and develop Muslim participation on behalf of the Caliphate. Muslim religious leader Maulana Mehmud Hasan attempted to organise a national war of independence against the British with support from the Ottoman Empire.</p> <p>The movement collapsed by late 1922 when Turkey gained a more favorable diplomatic position and moved toward secularism. After the Caliphate was abolished in 1924 and replaced by colonialism, Shia and Sunnis cooperated. Iraqi Shia ulama supported the Sunni rebellion against the British, and Iranian ulama went to the Caliphate Conference in Jerusalem in 1931 to try to restore the Caliphate. By 1924 Turkey simply abolished the roles of Sultan and Caliph.</p>		PC S KM
1924-1925	Islam: Sharifian Caliphate	<p>Hussein bin Ali then proclaimed himself caliph, basing his claim on his prophetic ancestry and his control of Islam's two holiest mosques, the Masjid al-Haram and Masjid al-Nabawi (collectively known as the Haramayn). Possession of the Haramayn was an indispensable condition for any caliph. According to The Times, Mehmed VI, the last Ottoman sultan and penultimate Ottoman caliph, sent a telegraph of support to Hussein after he had proclaimed himself caliph. Nevertheless, King Hussein's caliphate failed to receive wide recognition from the still-colonial Arab world and it was ended when the Hashemite family had to flee the Hejaz region after its capture by the Najdi Ikhwan forces of Ibn Saud (the founder of today's Saudi Arabia) in 1924–1925.</p>		PC S KM
	Islam: Sufi Caliphate	<p>In Sufism, tariqas (orders) are led by spiritual leaders (khilafah ruhaniyyah), the main khalifas, who nominate local khalifas to organize zaouias. Sufi caliphates are not necessarily hereditary. Khalifas are aimed to serve the silsilah in relation to spiritual responsibilities and to propagate the teachings of the tariqa.</p>		PC S KM

Governance actors and Eastern history				
Time	Era	Governance	Private life	Influence
1908-present	Islam: Ahmadiyya Caliphate	The Ahmadiyya Muslim Community is an Islamic revivalist movement founded in 1889 by Mirza Ghulam Ahmad of Qadian, India, who claimed to be the promised Messiah and Mahdi, awaited by Muslims. He also claimed to be a prophet, subordinate to Islamic prophet Muhammad. After his death in 1908, his first successor, Maulvi Hakeem Noor-ud-Din became the caliph of the community and assumed the title of Khalifatul Masih (Successor or Caliph of the Messiah). Ahmadi Muslims believe that the Ahmadiyya Caliphate established after the passing of the community's founder is the re-establishment of the Rashidun Caliphate. If a caliph does happen to bear governmental authority as a head of state, it is incidental and subsidiary in relation to his overall function as a caliph which is applicable to believers transnationally and not limited to one particular state or political entity. The current caliph is Mirza Masroor Ahmad, who lives in London with a following of 10 to 20 million in around 200 countries and territories of the world.		PC S KM
1920-present	Islam: Period of governance dormancy	Individualist, nationalist governance; heightened Shia/Sunni deviations; regional disagreements; challenge from militant establishment of Israel; lack of authoritative leadership; rise of terrorism, some state-sponsored		PC ISKM
Present	Islam: Caliphate goals	Some interest in Pan-Islamic programs; efforts in establishing caliphates by extreme groups		PC S KM
100 BCE to present	Ethnic in general		Directed by tradition according to ethnic and religious norms	PC S KM



## Appendix B – China PCISKM details

The question of relative power of actors is central to all of history, certainly in the study of governance, finance, and administration. China provides the longest recorded history of such matters. The scale of Chinese participation in markets and affairs alone is testament to the importance of understanding how this came about.

China has a long and interesting tradition in governance. Sustainability has been the norm, a fundamental reason China is large and powerful in our times. The magnitude of the Chinese state and diaspora a testament to the effectiveness of its policies over time. How has longevity been achieved? Etienne Balazs compares relationships between three groups, farmers, merchants, and the small, but very powerful bureaucracy.

Returning to the question of continuity, let us attempt a summary answer to the problem, for to understand in detail why bureaucratic society lasted so long in China would require deep and prolonged study. There can surely be no other ruling class to compare with the mandarin state for capacity to survive, wealth of experience, and success in the art of governing. It is true that as rulers they cost the Chinese people dear. The strait jacket into which the scholar-officials forced the amorphous body of China was agonizingly uncomfortable, and inflicted innumerable frustrations and sufferings. Yet this costly contraption served a necessary purpose. It was the price paid for the homogeneity, long duration, and vitality of Chinese civilization.<sup>248</sup>

As we can see, China's history is one of a longstanding, if not *kind*, form of authority.

A permanent vigilant demagoguery, handled with a consummate skill worthy of modern political propaganda, would make us believe that the peasant was the crown of the universe and that everybody was anxious for his well-being. There was, we are to understand, no possible comparison between the nobility of agriculture – the “fundamental occupation” as it was called – and other occupations, all of which were secondary, especially that of the merchants, whose baseness the Confucians never ceased to trumpet. In actual fact, an understanding existed between the scholar-officials and the merchants that operated against the interests of the peasantry, and it was far easier for a merchant to climb the social ladder than it was for a farmer.<sup>249</sup>

There was a meritorious clan, that of the mandarins, who functioned as the principal instrument of the state, localized.

All mediating and administrative functions were carried out by the scholar-officials. They prepared the calendar, they organized transport and exchange, they supervised the

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<sup>248</sup> Balazs, 20-21.

<sup>249</sup> Balazs, 40.

construction of roads, canals, dikes, and dams; they were in charge of all public works, especially those aimed at forestalling droughts and floods; they built up reserves against famine and encouraged every kind of irrigation project. Their social role was at one and the same time that of architect, engineer, teacher, administrator, and ruler. Yet these “managers” before their time were firmly against any form of specialization. There was only one profession they recognized: that of governing.<sup>250</sup>

How such governance was to take place is an important factor in understanding China's long term success. What has been documented is a longstanding weighing of interests of changing imperial powers, persistent, meritorious bureaucracies, highly praised, but ill-treated peasant farmers, and socially ill-thought-of, but powerful merchants and craftsmen.

As for labor, there was no supply of free labor except for state enterprises. The peasant labor force was a carefully guarded preserve which private enterprise was categorically forbidden to exploit. It is probably not an exaggeration to say that the Chinese peasant preferred being fleeced by the state than by a manorial lord or an individual contractor, finding state exploitation less hard to bear than exploitation by private individuals. But in any case he could choose only the lesser of two evils. The “protection” of the mandarin was a heavy burden, but there was no social group strong enough to protect him against the mandarin. This is the exact opposite of what happened in Europe. There, the serf was able to take refuge in free towns under the protection of the autonomous bourgeoisie.<sup>251</sup>

It is not as though the peasantry didn't have ways of fighting back. They lived in a highly complex, networked set of relationships. Furthermore, given their closeness to the soil and food production, they had sources of leverage that could not be seen nor understood in purely monetary terms.

... while the villages were not self-sufficient, the large market community was both an economic unit and a social universe. Marriages were commonly arranged through matchmakers at the market town. There, festivals were celebrated, a secret society might have its lodge meetings, and the peasant community would meet representatives of the ruling class – tax gatherers and rent collectors ... villagers participated in several networks – of kinship relations, secret societies, religious cults, militia groups, or the security system of mutual responsibility – that were not necessarily coextensive with the market network.<sup>252</sup>

The richness of this rural society, the core of Chinese culture, was based on wheat farming to the North and rice cultivation to the South. Great public works projects were carried out, particularly in the South, to manage waters from the two great Chinese rivers, the Yangtze to the South and the Yellow to the North. With time and increased capacity to manage water, farming capacity and farming moved to the South and to rice production, which was a considerably more productive use of the land.<sup>253</sup>

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250 Balazs, 16-17.

251 Balazs, 22-13.

252 Fairbank, 22-23.

253 Fairbank, 15-16, 168-170

This closeness and its fundamental reliance on working together, on co-dependence, is a key element in understanding the differential contributions of Eastern as opposed to Western philosophies. As outlined by Fairbank,

The heavy application of manpower and fertilizer to small plots of land has also had its social repercussions, for it sets up a vicious interdependence between dense population and intensive use of the soil whereby each makes the other possible. A dense population provides both the incentive for intensive land use and the means. Once established, this economy acquired inertial momentum – it kept on going. The back-breaking labor of many hands became the accepted norm, and inventive efforts at labor saving remained the exception. Early modernizers of China, in their attempts to introduce the machine, constantly ran up against the vested interest of Chinese manpower, since in the short run the machine appeared to be in competition with human hands and backs.<sup>254</sup>

This is in stark contrast to the experience in Europe, both in terms of the environment and traditional work patterns.

The ecology of the Chinese – their adaptation to the physical environment – has influenced their culture in many ways. Life on the great river floodplains has always been a hard life... They were forced to accept natural calamity in the form of drought flood, pestilence, and famine. This is in striking contrast to the lot of Europeans, who lived in a land of variegated topography.

Living so closely involved with family members and neighbors has accustomed the Chinese people to a collective life in which the group normally dominates the individual. In this respect the Chinese experience until recently hardly differed from that of other farming peoples long settled on the land. It is the modern individualist, be he seafarer, pioneer, or city entrepreneur, who is the exception. A room of one's own, more readily available in the New World than in the crowded East, has symbolized a higher standard of living. Thus, one generalization in the lore about China is the absorption of the individual not only in the world of nature but also in the social collectivity.<sup>255</sup>

Consideration of traditional Chinese living patterns is important to understand how it is that stability and longevity was achieved in spite of such persistent challenges.

To understand China today, one basic approach is that of anthropology, which looks at the village and family environment from which modern China has just begun to emerge. Even now the Chinese people are still mostly farmers tilling the soil, living mainly in villages, in houses of brown sun-dried brick, bamboo, or whitewashed wattle, or sometimes stone, with earth or stone floors, and often paper, not glass, in the windows. Frequently half their meager material income goes for food. The Chinese still lack the luxury of space. Farmers' dwellings have usually about four small room sections for every three persons. Sometimes

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254 Fairbank, 16.

255 Fairbank, 16-17.

family members of both sexes and two or three generations all sleep on the same brick bed, which in North China may be heated by flues from the nearby stove. There is little meat in the diet. Manpower still takes the place of the machine for most purposes.<sup>256</sup>

The farming village, which even today forms the bedrock of Chinese society, is still built out of family units that are permanently settled from one generation to the next and depend upon the use of certain landholdings. Each family household is both a social and an economic unit. Its members derive their sustenance from working its fields and their social status from membership in it. The life cycle of the individual in a farming village is still inextricably interwoven with the seasonal cycle of intensive agriculture upon the land. The life and death of villagers follow a rhythm that interpenetrates the growing and harvesting of the crops.<sup>257</sup>

Lack of respect for the peasant class entered into early studies in governance by Mao Zedong and his student compatriots in the 1920s.<sup>258</sup> When Mao was in control in the Yan'an period, they implemented a program of direct contribution to rural lifestyles, filling a role similar to what in the United States is referred to as an extension program, not unlike that provided by the state land grant universities in the United States.<sup>259</sup> This is the essence of the “organic law” as referred to in the Chinese system.<sup>260</sup> It was in the declaration of the organization of that activity that Mao made his famous quotation, “China has stood up.”<sup>261</sup> This relationship persists in the ongoing consultation function of Chinese governance.<sup>262</sup>

A party-led movement which endeavored to effect a social, political, and national revolution simultaneously proved to be better able to survive and prosper in an all-out war with and aggressive modern power than a purely nationalist and political movement. In the process leading to its final triumph, it effected a fundamental change in the relationship between political power and civil society. It redefined the relationship between political power and the major social groups in society. It enlarged the scope of mobilization and participation by establishing an organic link with the peasantry and by seeking cooperative relationships with a wide variety of social groups in a series of concentric circles of alliance.<sup>263</sup>

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256 Fairbank, 17-18.

257 Fairbank, 21-22.

258 Terrill, R. 1980. *Mao: A biography*. New York: Touchstone, Simon & Schuster, 94-95.

259 Snow, E. 1938/1968. *Red star over China*. New York: Random House, Inc., 219-226.

260 Tsou, T. 1987. Party masses, and citizens in rebuilding the Chinese State. In S. R. Schram (Ed.), 1987, *Foundation and limits of state power in China*. London/Hong Kong: School of Oriental and African Studies, University of London, The Chinese University Press, 262.

261 Mao, T. T. 1949. “The Chinese people have stood up.” In T. T. Mao, 1977, *Selected works of Mao Tsetung*, Vol. V. Beijing: Foreign Languages Press, 15-18.

262 General Affairs Office of the CPPCC National Committee, 6-8.

263 Tsou, T. 1987. Marxism, the Leninist Party, the masses, and the citizens in the rebuilding of the Chinese state. In S. R. Schram (Ed.), *Foundations and limits of state power in China*. London/Hong Kong: School of Oriental and African Studies University of London, The Chinese University of Hong Kong, 262.

And, yet, there were limitations, if not with regard to the bureaucracy, with the emperor himself, the personification of the state.

First of all, the Chinese emperor had no “right” to rule, but a “Heavenly Mandate” (tianming), i. e., a duty to fulfill. It was his duty to keep the human society in good order (zhi). The guidelines for this order had to correspond to a cosmic order which was believed to include moral principles. They were written down in traditional texts commonly called the books of rites (li). Their norms and principles were considered by the emperors as exemplary and binding. They limited his freewill and his right (capacity) to take political decisions.

The Qin emperors (221-207 BCE) had despised and ridiculed the authority of tradition and the li, and tried to throw off their fetters. They were absolute rulers. But the people, who felt the great difference made by such an absolute power, rebelled, and the succeeding Han dynasty re-instituted, and basically accepted as binding on themselves, the authority of the li, even though keeping many of the political institutions that that Qin had introduced. The succeeding dynasties followed in the steps of the Han, with the possible exception of the Yuan.<sup>264</sup>

This question of responsibility to serve the needs of the people as opposed to a license to exercise personal prerogative, utilizing the resources of the people based on individual whims and limited personal knowledge, proved very different in the East as opposed to the “divine right of kings” in the West. Although there were obvious examples of personal willfulness, it had to be carried out contrary to the prevailing culture, which was central to the entire Confucian educational process.

That the Chinese emperor had no right to rule but a duty to fulfill is shown by his responsibility for faults in the actions of government, which he constantly admitted in public declarations. He took upon himself the blame for social disorders and failures in public administration. The self-accusations of the emperor which we meet so often in the historical records may today seem to us empty words or sheer propaganda, but they assuredly had an important meaning in the realm of political theory. Furthermore, the emperor's doing were all minutely recorded, and after his death and the end of his dynasty the official historiographers of the next dynasty had to write a history of the preceding one in which they passed judgment on the dealings of each of the emperors. ...

The guidelines restricting the actions of the Chinese emperor were not only written down in the historical texts; they were also institutionalized in the political structure of the state. Thus we find special advisers with the title of “tutors” to the emperor and the institution of “remonstrators”. The latter belonged ordinarily to the Board of Censors. It was their duty to admonish the emperor whenever he transgressed the traditional norms. Certainly the real influence of these officials varied considerably over time. It faded under despotic-minded emperors, and much depended on the character and courage of officials. The stories of

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<sup>264</sup> Schram, 316-317

upright remonstrators, some of whom paid with their lives for fulfilling their duty, were kept alive in the historical records as constant examples for good government, as a reminder for the living rulers, and as evidence that the ideal of what is considered a good government, namely a restricted one, was never lost.<sup>265</sup>

Nonetheless, there was a lack of effort to embrace and understand knowledge generally. In part this can be attributed to an embedded conservatism in Confucian thought and in the combined effects of Confucian and Buddhist traditions.

It is unnecessary to dwell on the absence of the natural sciences in China. Lacking systematic hypotheses expressed in mathematical terms and verified experimentally, Chinese science never got beyond the protoscientific stage, despite the fact that this initial stage was full of promise and that there was plenty of scientific aptitude... Most probably the main inhibiting cause was the intellectual climate of Confucianist orthodoxy, not at all favorable for any form of trial or experiment, for innovations of any kind, or for the free play of the mind. The bureaucracy was perfectly satisfied with traditional techniques. Since these satisfied its practical needs, there was nothing to stimulate any attempt to go beyond the concrete and the immediate.<sup>266</sup>

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265 Schram, 317-318.

266 Balazs, 22.

## Appendix C – The Three C's Development Model

### Capacity

China, the Emirates, and Poland have different histories and different national priorities.

Notwithstanding, there are fundamental issues that underscore the financial management of the three countries. Fundamental among these is the need to identify areas of competitive advantage. This is to say that in the regions in question in each country, there is something that can be provided there that is equal to or better than what can be provided elsewhere, other things being equal. In China of late, economic advantages have been based on low cost manufacturing, characterized by typical manufacturing output with lower labor costs. The Emirates has leveraged its position between the Middle East and all parts of the world, combining factors from East and West. In Poland, the same has been the case as China in manufacturing, albeit with more emphasis on higher value manufacturing acumen, but at lower cost than the norm among advanced economies.

In the consideration of capacity, it is important to note the effects of this through history. China and Poland have served their own needs well, to different ends. Never having been truly invaded before the 19<sup>th</sup> century, China fed itself, with a rising and declining tide based on indigenous climate changes and dynastic cycles. Famously, when the West came calling, it had nothing that China needed or wanted. Similarly, Poland is not known for forays out in the world. The Poles were not colonizers, forcing their collective will on others. It fed itself and much of the rest of Europe at times. More often than China, Poland was imposed upon. In both cases, the countries benefited from “peasant power” and a lot of it.

The southern coast of the Arabian Gulf is of great strategic importance for a number of well-known reasons. This was not always the case. Although incomes were achieved from harvesting pearls, most economic activities involved trade, mostly in personal and domestic commodities. Positioning in the Islamic world between east and west was a beneficial advantage. The British demonstrated interest in time, resulting in the interesting title of the “Trucial States” in the region – most of which are now a part of United Arab Emirates. Many truces were entered into. Generally-speaking, oil production and other natural energy and resource endowments have brought wealth, but this is an uneven situation; some have prospered more than others. Some have prospered much more than others.<sup>267</sup> The Emirates have assumed leadership in current times due to patient management of resources coupled with targeted marketing and development efforts.

The United Arab Emirates is the only country in the world that engages in personal health testing on anything like the scale proposed by the *2020 Program.*, although it is widely known that large-scale

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267 Hourani, A. 1991. *A history of the Arab peoples*. Cambridge, MA: The Belknap Press of Harvard University Press, 269.

testing will be necessary in order to achieve improved health outcomes. “everaging and extending activity in this area is certainly in harmony with objectives of the BWA Consensus.

In Poland in the 18<sup>th</sup> and 19<sup>th</sup> centuries when the country was under control by foreigners, significant efforts were taken to expand on the capacity of the people. When faced with efforts by conquering neighbor states to extinguish their culture altogether, under the rubric of “organic work”, Polish cultural leaders carried out significant efforts to educate and prepare the lower classes in particular. This demonstrated adaptability and commitment to expanding on the capacities of the people in the face of urgent need. Under these secretive programs carried out over several decades, Poles would “... stand up to the Germans by keeping their houses cleaner, tending their livestock and crops with greater care, working harder and educating themselves and their children”.<sup>268</sup> Achievements by Poles around the world as well as in Poland are testament to the success of such efforts.

Part of the positivist movement of the 19<sup>th</sup> century, similar efforts were anticipated in China when under attack by Western interests. Yen Fu, a leading Chinese scholar, government official, and translator of many of the Western classic works of science and philosophy, was an active proponent of similar activities in China.<sup>269</sup> In the case of Poland,

Positivism and the program of organic work which accompanied it produced impressive results. Everything from hygiene to education was affected. People with brains were encouraged to use them to pursue specific goals rather than to waste them on planning hopeless risings. It is largely thanks to this that Poland did not disappear from the intellectual map of Europe along with its frontiers.<sup>270</sup>

Capacity issues are critical in any case. They change with time. In China, the more recent object is to identify talent in design and product development, the advancement from “made in China” to “created in China.” Similarly, with Poland, the challenge is to deepen penetration in manufacturing markets through its traditional areas of strength in avionics, automation generally, automotive manufacture, and furniture. Of course, both countries have broad, strong agricultural markets that sustain local needs and provide commercial opportunities in their respective regions.

Not only is talent, or abilities, on the part of the populace important, but access to knowledge generally. Of course, the ability to discover or amplify on existing knowledge is an important area of ability, one that can bring substantial social good and introduce commercial and industrial opportunity.

All traditional cultures embody social, political, and economic elements that have supported their existence. Under the rubric of the Washington Consensus and clear objectives of Westernization,

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268 Zamoyski, 277.

269 Schwartz, B. I. 1964. *In search of wealth and power: Yen Fu and the West*. Cambridge, MA: Belknap Press of Harvard University Press.

270 Zamoyski, 279-280,



modernization and integration with world markets has been considered equivalent to abandoning such cultural factors. In some cases, such changes have occurred successfully and without incident. In others, it has proven to be an abysmal failure. This includes traditional societies, cultures, and clans on every continent, involving all cultures and racial groups.

Islam is an example of one culture, a major religious and cultural group dating to the 7<sup>th</sup> century, that constitutes such a full belief system and lifestyle.

The Koran emphasizes the virtue of human charity and inspires a sense of social obligation which is felt by all Muslims and is reflected in their political institutions. Mosques are commonly embedded within a complex of schools, hospitals, baths, and charitable institutions whose upkeep is part of the duty of a Muslim.<sup>271</sup>

Any approach to development involving these groups will need to be inclusive and supportive of such factors in order to succeed. For that matter, by providing support and guidance characterized by dual control and fluidity, the longevity of such cultures can be leveraged, supporting peace, order, and stability for the groups themselves. This can thus allow them to resolve critical questions of longevity and sustainability as they always have.

## Cooperation

Cooperation is a higher priority in the three civilizations than is the international norm. China and Poland look to establish commercial legitimacy through a collaborative, cooperative approach as opposed to the more top-down corporatist approach of the Western development model. Islam may even be more committed to such norms. The Western model has contributed to a global system that is notably non-responsive, with vulnerabilities associated with inflexibility and insensitive to knowledge-based solutions, what were called “root-and-branch” solutions.<sup>272</sup>

Cooperation can be viewed from three cooperative. post-Soviet perspectives, Asian – as exemplified by China, European – as seen in the evolution of Poland's industries and markets, and cooperative development in the American Great Basin in the nineteenth century. Using his phrase “economics of virtuous haste,” Grossman, citing Arrington, contrasts Soviet experience with that of nineteenth century Mormons in terms of motivation and social cohesion.<sup>273</sup> Arrington refers to four collaborative, communal development options in the nineteenth century Great Basin experience, three of which proved effective. There has long been understanding of the beneficial levels of commitment and unit... This is not the kind of cooperation that results from power, violence, and manipulation, not in the long

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271 Wright, E. (Ed.). 1985. *History of the world*. London: Bonanza Books, Crown Publishers, Inc., 366.

272 Eichengreen, 2015, 375.

273 Grossman, G. 1983. Economics of virtual haste: A view of Soviet industrialization and institutions. In P. Desai (Ed.), *Marxism, central planning, and the Soviet experiment*. Cambridge, MA: The MIT Press, 210-211.

term. Commitments to togetherness in this regard may be derived from a variety of factors and experiences, social, ethnic, familial, religious, etc.

The following makes reference to 19<sup>th</sup> century Mormon colonization experience in the American west.

Mormon society had, as it still has today under very different arrangements, a highly pronounced production ethic. It maintained a virtuous social order. It was in many ways successful economically . . . The strength of its experiment lay, first, in remarkably able leadership with great organizational talent; second, in that its human element, at least in two generations in question, was largely self-chosen and inwardly committed to the system; and, third, in its genius for combining seemingly disparate institutions into a functioning whole. For the system was a mixed, one, with a large nationalized (“ecclesiasticized”) sector but with full-blown capitalism in the rest of the economy. Material incentive did not stop with labor earnings... Making money was highly approved of by the church, which frequently tapped the privately accumulated fortunes for communal purposes.<sup>274</sup>

Such cooperative models, whether in Asia, Europe, or elsewhere, embody a clear preference for consultation and soft collaboration with experts and localized interests to incorporate a more inclusive decision pattern with respect to social preferences and knowledge-based inputs. There are many examples of this in indigenous cultures around the world. Another good example, with a very long heritage, is the Maori culture in New Zealand. Combined with communal traditions from China and Poland, such traditions outline local and regional options that could prove successful where corporatist approaches have failed. These preferences stem from both socialist traditions of late and long-standing historical norms that combine top-down, authoritative power with horizontal, collaborative and network patterns – this is to say, dual control.

## Currency

China, the UAE, and Poland have developed independent currency regimes. China has aspirations to establish its currency as an internationalized alternative to the U.S. dollar as a store of wealth and as a medium for global transactions. While Poland is in negotiations with the European Union with regard to inclusion in its euro currency, that has yet to occur and may not. Establishment of currency is a major aspect of economic viability as well as sovereignty.

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<sup>274</sup> Grossman, 210-211.

## **Appendix D – Economic, managerial and technical issues**

We are not apologetic in providing the next three models. This work defines much of my career. In the case of the three models, we are not aware of any other substantive work in any of the three areas. Each makes a unique contribution to the overall goals presented here.

Model Economics dates to my experience in venture capital in the 1980s. This is a dynamic model for economic development and analysis. It serves to integrate economic, governance, and social issues. Kenneth Tingey made a presentation to several young economists in Beijing in meeting of the Chinese People's Political Consultancy Conference in 1989.

Methods-Based Management is a consolidation of research and practice in many scientific fields. It is a scientifically-grounded management model, the only one we are aware of. This is a consolidation of process-based research and other developments in management and organizational optimization.

The “Big E, little e” model is a result of research in event accounting as a part of studies in accounting and finance along with private development efforts. It would be difficult to achieve the objectives of either Model Economics or Methods-Based Management without application of these concepts and models.

### **Model economics and balancing the economy**

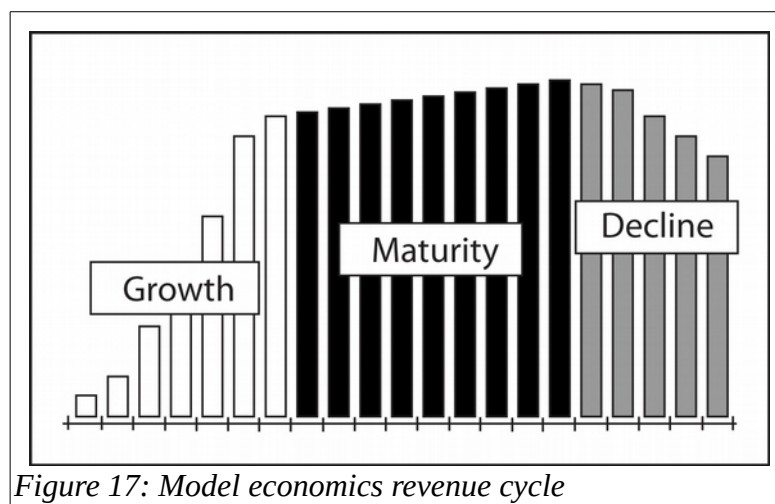
Economic affairs reflect human preferences and social conditions as overlaid on the workings of nature, which are not altogether predictable. Thus, while the performance of organizations, financially and otherwise, are predictable in the short term, their prospects are subject to cycles of performance that inevitably lead to decay and decline, opening up space for new economic organization. Such cycles are not altogether mutually exclusive, at least with regard to economic measures and resource consumption, both of which tend to expand. Nonetheless, economic affairs can be understood as cumulative combinations of organizational units that themselves follow patterns of growth, maturity, and decline.

Traditional economic policy does not explicitly support such distinctions. There is an implicit assumption in policy development that economies average out, that they are characterized by grand cycles based on fiscal and financial cycles of prosperity and decline. This averaging out ignores other market cycles, considering as it does eccentricities of money markets. In this, it ignores fundamental, underlying issues that contribute to prosperity as they pertain to other markets. Furthermore, the approach ignores social issues and relationships between society and the economy.

This lack of synthesis has not occurred in a vacuum. As has been noted earlier with regard to finance and accounting, there has been a consistent pattern of denial as to such possibilities. An important

example of this is *Economy and Society*, a 1956 work by Talcott Parsons and Neil Smelse.<sup>275</sup> In this work, they make reference to the economy as an adaptive sub-system of society. This is to say that the economy exists to meet the needs of society, to adapt to internal and external changes, tensions and strains in particular. They make reference to respiratory and digestive functions of biological organisms as examples of these.<sup>276</sup> Such adaptations, as they say, occur in relation to value systems of the society.

Model economics provides a structure of understanding such cycles. As conditions change, opportunities for gain present themselves, but not forever.<sup>277</sup> Revenue-generating opportunities, as seen in *Figure 17, Model economics revenue cycle*, take place according to such a cycle.



As seen in *Figure 18, Model economics issues*, the three categories represent fundamentally different economic and social factors. Typical policy and economic governance does not account for such differences.<sup>278</sup> Growth occurs under certain kinds of circumstances. Maturity, representing the largest component of a healthy, competitive environment, involves very different conditions, with very different requirements. The same is true of a declining environment. Without detailed data, particularly with regard to revenue patterns, it may be difficult to recognize that decline has set in. As in biology, however, and ecology in general, it is a very different environment that demands very different treatment.

<sup>275</sup> Parsons and Smelse.

<sup>276</sup> Ibid., 17.

<sup>277</sup> Tingey, K. B. 2015/2008. *Introduction to model economics: Understanding growth, maturity, and decline*. Logan, UT: Author.

<sup>278</sup> Eichengreen, 2015, 375.

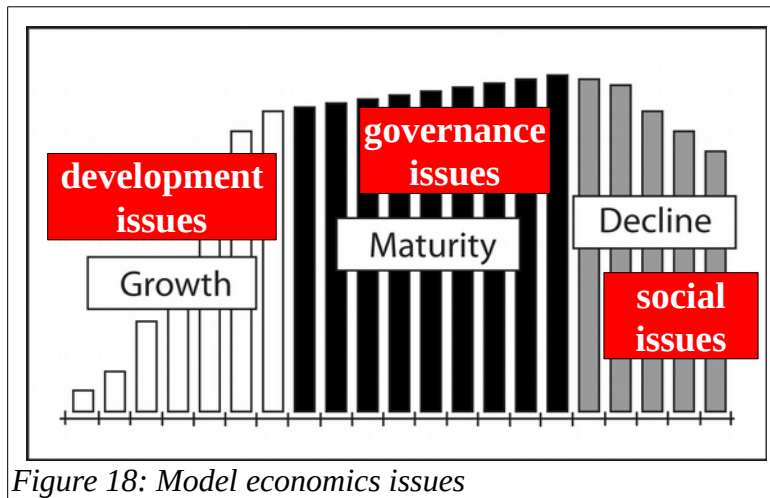


Figure 18: Model economics issues

An effective economic policy and governance environment will take such dynamics into account, although such policies are rarely addressed directly. As seen in *Figure 19, Model economics cash flow cycle*, there is a decided lag factor with regard to profitability and cash generation. This is a very challenging prospect for new projects, as they consume cash before they provide it. Of course, this puts them in a very disadvantageous position when compared with mature sectors. Furthermore, on the decline side, cash generation continues on even though revenue patterns are decreasing. This leads to false hopes if not recognized and dealt with.

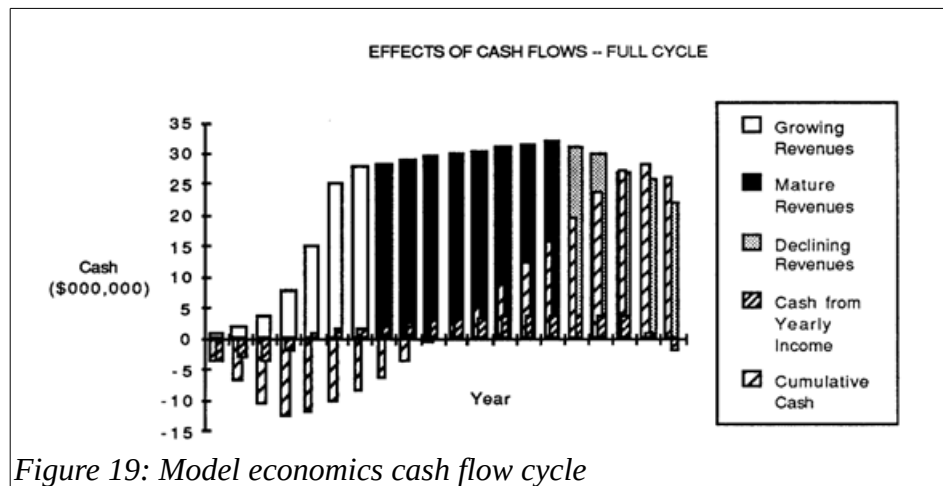


Figure 19: Model economics cash flow cycle

This situation is rife for manipulations of various kinds. With resources and knowledge of market factors, strategies can be employed to deal with falling demand associated with primary demand. Faced with eleven straight years of falling demand for its primary product, one company has found ways of keeping revenue in line through detailed manipulation of product packaging and presentation. This is seen in *Figure 20, Example of revenue manipulation*. Such distortions can occur in any and all arenas subject to managerial control. Of course, they can also participate in legitimate financing arrangements

such as venture capital. Such arrangements can also provide opportunities for distortion and evasion, a very common condition. Such kinds of manipulation aren't likely to benefit society as outlined by Parsons and Smelse.

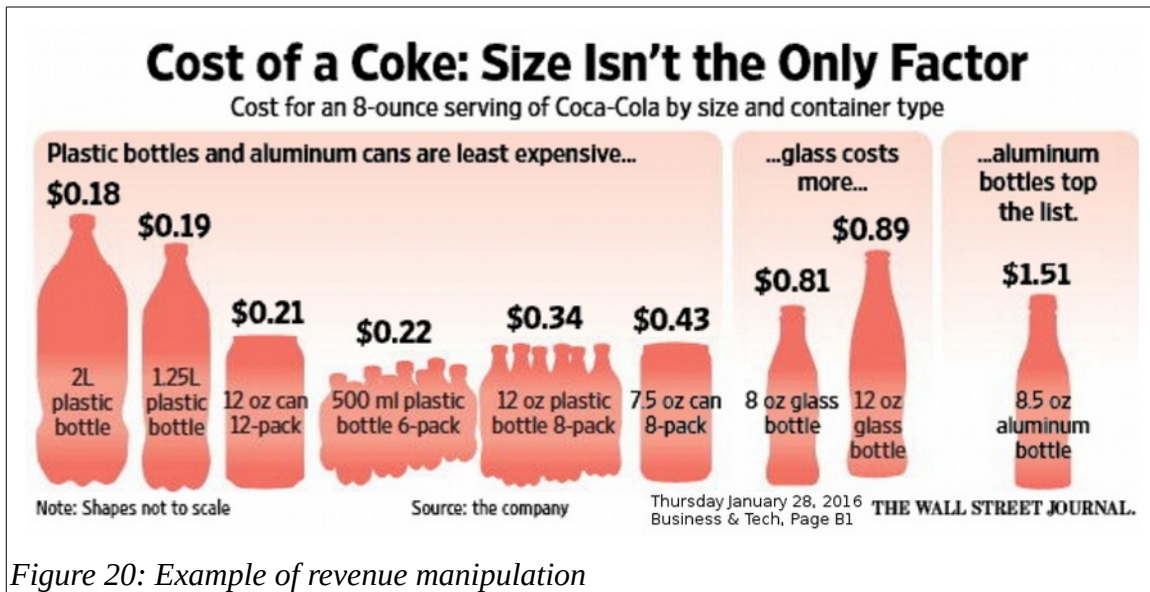


Figure 20: Example of revenue manipulation

As as seen in Figure 21, Model economics development issues, the growth sector brings innovation to the table, where support can be made available where cash generation is already under way. Of course, this can occur systematically through financial arrangements. This is what venture capital is all about. This is also the motivation for many mergers and acquisitions, making use of available cash before it otherwise runs out.

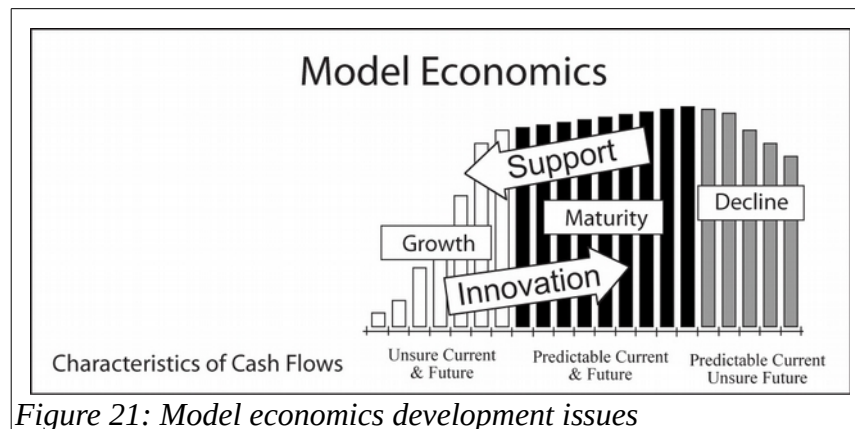


Figure 21: Model economics development issues

In Figure 22, Model economics economic roles, twelve roles can be seen. Under growth assumptions, where the future is unsure, the roles of managers, employees, investors, and policy makers are very different than are present in mature and decline environments. The table in the Figure outlines these,

demonstrating different requirements for policy makers that have much to do with finance and governance.

THE TWELVE ECONOMIC ROLES			
Managers	Entrepreneurs	Stewards	Restructurers
Employees	Believers	Negotiators	Survivors
Investors	Speculators	Market Watchers	Leftovers
Policy Makers	Husbandmen	Monitors & Taxing Agents	Judges of Last Resort

Figure 22: Model economics economic roles

Figure 23, *Model economics full model* outlines the entire program in support of dynamic economic elements. Policy implementation keeping such dynamics in mind provides for continual economic adjustment that should smooth out economic cycles generally. International commentators indicate that in order to achieve this objective, the Chinese government will require “rebalancing the Chinese economy, developing the country's financial markets and opening them to the rest of the world, and moving to a more flexible exchange rate.”<sup>279</sup> It is possible that, without knowing it, such commentators are talking about this, promoting balance between growth, maturity, and decline.

<sup>279</sup> Eichengreen and Kawai, back cover.

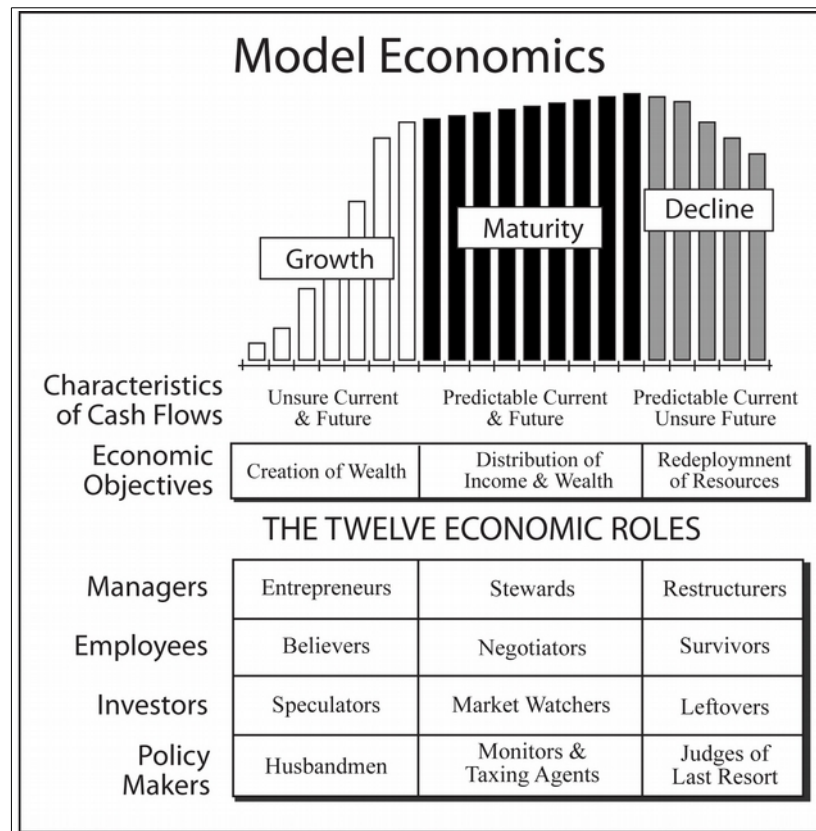


Figure 23: Model economics full model

## Methods-based management, legitimacy, and dual control

The 20<sup>th</sup> century saw the development of science-based groundings for organizational legitimacy, but they are in need of consolidation. As referenced earlier, the physicist Walter Shewhart established a data-driven, process-centered approach to perfecting the output of organizations in the 1920s. This model proved itself in industrial and military environments in North America thereafter, in the American buildup of military materiel in World War II,<sup>280</sup> in Japan after the war, and on a global basis from the 1980s thereafter.<sup>281</sup> Unfortunately, the methods were not recognized for their general applicability for governance and finance at that time, but they were intensified in manufacturing processes everywhere.

The potential for leveraging the Shewhart model in non-manufacturing environments was further limited by the introduction of information technologies that were not adaptable to the unique aspects of processes as laid out by Shewhart and, later, W. Edwards Deming, who promulgated the Shewhart

<sup>280</sup> Wallis, W. A. 1980. The Statistical Research Group. *Journal of the American Statistical Association*, 75(370), 320-330.

<sup>281</sup> Gitlow, H. S., and Gitlow, S. J. 1987. *The Deming guide to quality and competitive position*. Englewood Cliffs, NJ: Prentice-Hall, Inc.



approach on a global basis for over sixty years. Characteristics of such technologies and methods were suggested by accountant George Sorter and data specialist Edgar Codd beginning in the late 1960s, but they were not adapted to available technologies in any useful way. Process-oriented design models were established by Dell K Allen and the Manufacturing Consortium of major North American manufacturing corporations in the 1970s and 1980s, but they were never introduced for mainstream use.

The concepts of dual control and fluidity are derived from efforts to combine all of these. It took decades to recognize the relationships and to develop methods and models to take advantage of them. Methods-based management (MBM) is the result of this effort. It combines the Shewhart-Deming models with the process approach of Allen and the Manufacturing Consortium. To this are added network evaluation technologies and models, event accounting treatments that link data and process, and an implementation model developed using grounded theory.<sup>282</sup> Similar to the model economics approach, MBM is derived from the scientific method, depending on expert evaluation of a constant stream of data.

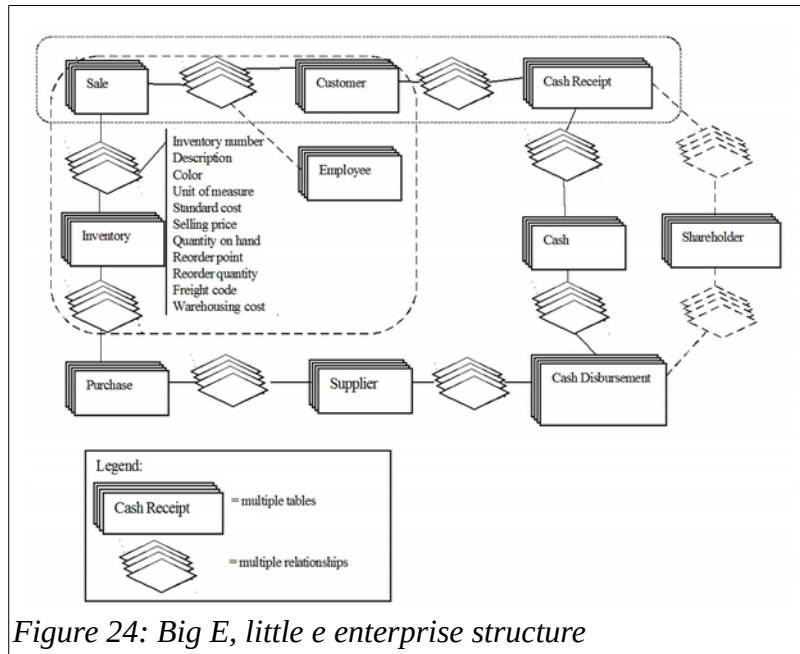
## **“Big E, little e” technical matters**

Before considering prescriptive measures, consideration of basic data management changes in a dual control environment is a good idea. Kenneth Tingey extended the basic ideas of Sorter and Cushing to consider two aspects of accounting events that hadn't been clarified.<sup>283</sup> This is the idea of “Big E” events, the full process under consideration as separated from the individual items. These are referred to as “little e” events, individual items that together make up the processes. This description of the “Big E, little e” model is incomplete, intended to only provide some idea of the prospects for breadth as well as scale in terms of the needs of enterprises or collections of enterprises. *Figure 24, Big E, little e enterprise structure* outlines the kinds of data needed to support enterprise requirements.

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282 Tingey, K. B. 2009. *Methods-based management: Breakthrough performance on leaner budgets*. San Diego, CA: University Readers.

283 Tingey, K. B. 2013. *The angels are in the details: Control and regulation ... in a good way*. Logan, UT: Profundities LLC., 110-162.



Following in *Figure 25, Big E transaction table*, we can see a data array that represents various kinds of events or processes. They can all fit into the same data structure, with no needed modification for different subject areas or models.

BigETranID	BigEID	AgentID	BigETranTimeDate
132	26	1	2/15/2002 2:05:15 PM
133	27	1	2/15/2002 2:05:15 PM
134	28	1	2/15/2002 2:05:15 PM

Figure 25: Big E transaction table

*Figure 26, Little e transaction table*, outlines individual items tied to the Big E events or processes. The point is that all transactions of all types can thus be organized. This is to say that the structure of the system supports any and all subject areas and allows for full conceptual integration of the system. There are many benefits to this, allowing not only for full integration, a knowledge-driven environment, but improved personalization and security.

The structures in question support dual control in a multiple-enterprise environment. In this way, it provides an environment to accomplish finance system objectives as outlined herein.

LittleETranID	LittleEID	BigETranID	LittleETranTimeDate	LittleETranUnits
1161	45	132	2/15/2002 2:05:15 PM	15
1162	46	132	2/15/2002 2:05:15 PM	15
1163	47	133	2/15/2002 2:05:15 PM	15
1164	48	133	2/15/2002 2:05:15 PM	15
1165	49	133	2/15/2002 2:05:15 PM	15
1166	50	133	2/15/2002 2:05:15 PM	15
1167	51	133	2/15/2002 2:05:15 PM	15
1168	52	133	2/15/2002 2:05:15 PM	15
1169	53	133	2/15/2002 2:05:15 PM	15
1170	54	134	2/15/2002 2:05:15 PM	8
1171	55	134	2/15/2002 2:05:15 PM	8

Figure 26: Little e transaction table

## Appendix E – Demiology, the science of human prosperity

Demiology is a unifying approach to the understanding of human prospects.<sup>284</sup>

Demiology is the integrated, scientific study of human prosperity. It represents the integration of the sciences, as it nests all aspects of scientific together. Advancements in network methodologies and complex models allow for an integration of what have been referred to as physical as opposed to social sciences. All things, it has come to be known, are derived of finite classifications of physical forces. Great progress has been made in the understanding of such forces, of measuring and monitoring them, and of understanding pathways and processes under which they control and make all things possible.

As can be seen in *Figure 27, Demiology relationships*, the physical environment encompasses all things, energy, matter, structures and phenomena. This includes our environment on earth, extending through the Solar System, the Milky Way universe, and beyond. All living things exist within this cocoon. We know very little about living things apart from the earth, but we know that such phenomena exist. At all levels among and between the physical and the living environments there are interactions, checks and balances, in essence, transactions. In this, it can be said that there is a natural economy, where interactions are measured, resources are shared, and a constant accounting occurs. Such a system tracks real costs.<sup>285</sup>

Within living systems, we see society, the totality of human experience. Society represents how people chose to live. Within society is an artificial construct, an economy, that represents ways of facilitating transactions and achieving societal goals.<sup>286</sup> The dotted line around economy in *Figure 17* represents this artificiality. This economy represents preferences and choices within society. It interacts with the

284 Tingey, K. B. 2016, February, Unpublished. *Demiology*. Logan, UT: Spendlove Medical Research Institute.

285 Parsons and Smelse, 30.

286 Parsons and Smelse.

natural economy in that it has its own means of establishing activity, transforming matter, and accounting for results and values. It tracks money costs.

There are societal types that also have to do with the human economy. These include individual persons, who emanate from families, where there are strong relationship bonds, physical, mental, and emotional. There are also organizations of all kinds. These are collections of disinterested persons for any and all reasons apart from what brought them together in the organizations in question. These may be commercial enterprises, schools, religious organizations, governments, charitable organizations, clubs, or other kinds of institutions. They may be heavily involved in the societal economy or not.

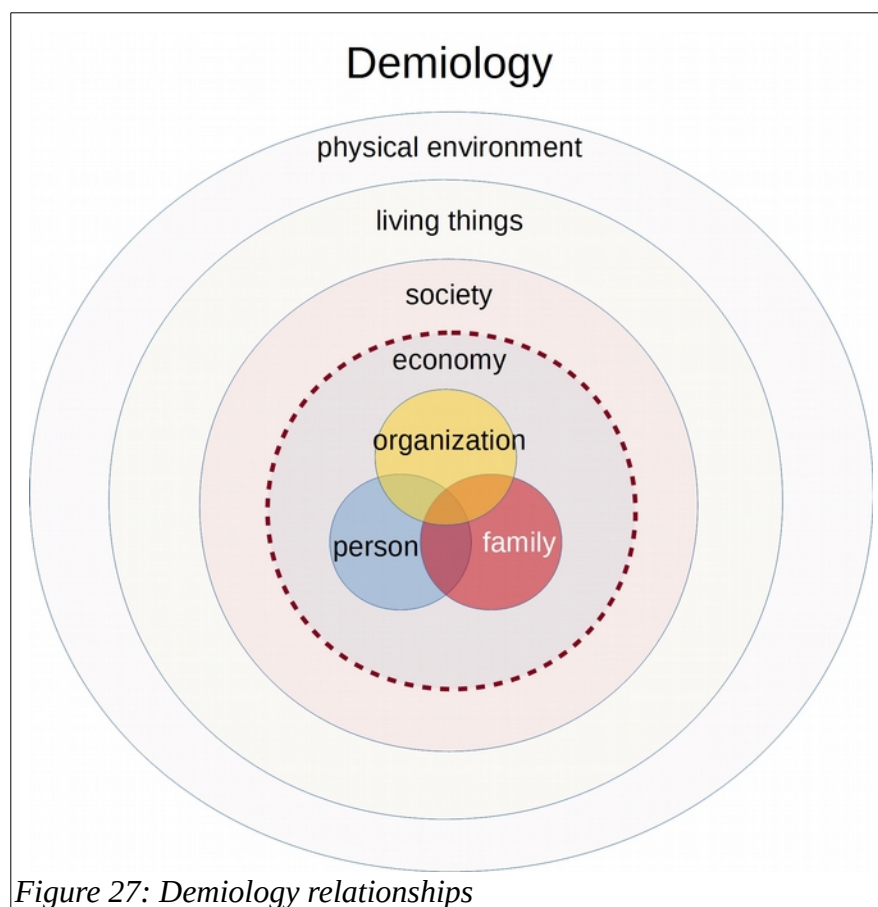


Figure 27: Demiology relationships

There is, of course, overlap between person and family. This is an artifact of birth and upbringing. With age and cultural assimilation people develop associations outside of the family. This could include school or work arrangements at various stages of personal development. Furthermore, there are family relationships that do not directly involve the person. These could involve other family members or relationships associated with familial roles, such as those of parents. There are circumstances under which society itself is considered to be all-encompassing, an organization in its own right. This could

involve a highly progressive government arrangement that would adjudicate virtually all associations among the other groups. This could be considered to be the case as a matter of degree.

Of particular interest is the circumstance under which the person, the family, and the organization are intertwined. The obvious example of this would be a family business. It would, in some such cases, presume some level of authority with regard to management of the organization, but this would not necessarily be the case. Full intersection of this kind could be an employer of all family members or a religious organization to which all family members belonged.

Given the intimate nature of family members, such overlapping associations can be considered more passionate than would be the case otherwise. More than this, the idea of modern corporations is they be “fictitious persons,” dispassionate and aloof. They are to be a modern expression of rational, modern decision-making. Thus, when organizations are managed by family members or significantly influenced by them, such feelings are to be ignored or denied. Family relations and feelings are particularly unwanted where personnel questions are concerned. To make preferences based on family connections is nepotism, a practice held in low regard in Western business. Furthermore work relationships and family relationships are to be maintained separately such that disclosure of developments in one arena are held to be strictly forbidden. This issue of family vs. non-family extends to motivations, commitments, and behaviors that could significantly affect the organization and others involved in it.

Of course, many relationships may exist that exhibit these characteristics. Whether in the physical realm or any of the other subsets, complexity is staggering. Nonetheless, from the small to the very large, science provides guidelines for understanding phenomena. The principal goal is two-fold. First, we must work from the physics, from the elemental particles and forces up through the chemistry and thermodynamics to meso and macro phenomena. This will give us groundings in the root causes for conditions of security and health. It will also provide tools and technologies to continually understand, monitor, and control them. Second, we must start with known phenomena and practices and work down to more elemental conditions, linking current knowledge with understandable causes and correlations. This will allow us to make sense of current practices and provide guidance as to how to improve them. With regard to disease conditions, the point is to eliminate the need for mitigating practices altogether.

The science of demiology is integrative and active. In every case, the object is to understand root causes. As such there is no meaningful distinction between physical science and social science. Innovations in methodology are helpful in this regard. For example, research in physics and biology has significantly benefited quantitative and visual developments in social network analysis. This is of particular interest in the understanding of complex phenomena, in the cycles of growth and decline of individuals and populations, and in relationships between data, processes, and pathways.