I am writing this article to suggest a thought experiment. The thought experiment I have in mind is of the “constructive” and mediative (vs. “destructive” and contradictive) type, one that moves from what is known to an expansion of scope that draws out a new possibility—in this case, a reliable worldwide property registration system.

Why is this needed? Because at the dawn of the 22nd Century—in the year 2100—the world is likely to have 10 to 13 billion residents, with most of this new growth happening where capital formation is low because corruption is high. Corruption is a primary cause of what noted economist Hernando de Soto calls “dead capital”—where people have assets that are undocumented: “houses but not titles; crops but not deeds; businesses but not statutes of incorporation,” and therefore have no way to use these assets to raise capital. In short, they experience the “registration” problem.
What if there were a Worldwide Property Registry (WWPR)—a way to bring to life at least some of these assets to solve the registration problem, thereby enable their use to raise capital? A WWPR could help with a partial fix at least: not an end to corruption, but an end to much of its deleterious influence on human economic well-being by circumventing capital-killing corruption.

Corruption

Corruption is the use of public office for private gain.

Corruption bleeds away capital from productive use (e.g. business production of products and services) toward unproductive use (e.g. personal gain: consumption or hoarding) by holding hostage asset documentation, creating the registration problem. In some countries, government workers responsible to verify titles, deeds, and corporate entities engage in corrupt practices, making the obtaining of the documents required for legal validation (registration) impossible in practical terms. For example, functionaries in some governments hold registration hostage for private gain by holding up documentary approvals, as evidenced by how long it takes to register property. Thus in the Philippines, it takes 168 steps over 13-25 years to formalize title to urban property; 6-14 years in Egypt to gain access to desert land for construction, and; 111 steps over 11 plus years in Haiti to obtain a sales contract to buy property after having leased it for an additional 5 years.[8] If one questions whether corruption is a likely reason for the registration problem, then consider the following: Out of 176 countries that were ranked in the 2016 Corruption Perceptions Index (CPI)—with #1 being least corrupt and #176 being most corrupt—the Philippines was 101st, Egypt was 108th, and Haiti 159th.

What will we do at the dawn of the 22nd Century when the world’s ten largest cities are expected to be in countries that average 123 of 176 on the CPI?[9] According to the Global Cities Institute, in the year 2100 the world’s largest city is estimated to be Lagos, Nigeria (CPI = 136) with over 88 million people; second, Kinshasa, Democratic Republic of the Congo (CPI = 156) with 83.5 million people; and third, Dar Es Salaam, Tanzania (CPI = 116) at 73.7 million.[10] These estimates raise the following question: Could there be a better way to start solving the (likely to be) ever-growing registration problem in places where endemic corruption persists in the local government registration system?

The local government registration system includes the set of functions and functionaries that provide verification of property rights. These infrastructures have grown over decades, perhaps even centuries; and they are very hard to change.
For these reasons, an informal-underground economy has arisen as a workaround as described in Table 1.

<table>
<thead>
<tr>
<th>Table 1: A Taxonomy of Types of Underground Economic Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monetary Transactions</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td><strong>Illegal Activities</strong></td>
</tr>
<tr>
<td>Trade in stolen goods, drugs; manufacture of drugs; prostitution, gambling, fraud</td>
</tr>
<tr>
<td><strong>Tax Evasion</strong></td>
</tr>
<tr>
<td>Unreported income from self-employment, wages, salaries, and assets</td>
</tr>
<tr>
<td><strong>Legal Activities</strong></td>
</tr>
<tr>
<td><strong>Do-it-yourself work</strong></td>
</tr>
</tbody>
</table>

Source: This table was provided by Professor H.G. Grubel.

According to the International Labor Organization, “the informal economy comprises more than half of the global labour force and more than 90 percent of Micro and Small Enterprises (MSEs) worldwide....with millions of economic units operating and hundreds of millions of workers pursuing their livelihoods in conditions of informality.”

Much of the capital that supports the informal economy, if not completely dead capital, then is at least capital that is severely compromised due to corruption.

**A Thought Experiment Framework**

Presently, then, the economic state of affairs is one of failure to address adequately the registration problem. Which raises the question: How could corrupt local government systems be circumvented? To answer this question, we need to envision the capital formation/registration landscape more comprehensively. To do this, two tasks are required: 1) to identify better registration methods—how collateral, as the basis for capital formation, can be recorded for all to see (and therefore to be put to work) and; 2) to distinguish the types of collateral that serve as surety, or guarantor for repayments.
1. **Registration/Encoding Method.** Currently, public registration has only been possible through interaction with some governmental entity. The registration problem that affects capital formation has arisen because of the failure of the public registration system for property in much of the world. However, with the rise of crypto-currency technology it is now becoming possible to "register" such currencies (e.g. bitcoin) and other asset representations (e.g. deeds, titles, etc.) by encoding them using virtually uncrackable public tools such as blockchain methods.[14]

2. **Surety/Guarantor.** Most collateral to date has been physical in nature: e.g. cash, inventory, and fixed assets such as land and equipment. Until recently, social-type collateral was under-considered in capital formation but was quite viable in other uses. Previously, for example, social collateral for funds or value transfer were used for informal value transfer systems: *hawala* in the Middle East, Afghanistan, and the Indian Sub-Continent; *hundi* in India; *fei ch’ien* in China; *phoe kuan* Thailand; and the *Black Market Peso Exchange* in South America.[15] But with the introduction of the micro-lending process by Muhammad Yunus[16] (where in its beginning, several women within a borrowing group in a village would all stand surety for just one borrower from that group), the formalization of social collateral became more widely established (e.g. the Grameen Bank). De Soto refers to such developments as creating more efficient “representational tools.”[17]

Thus, as both physical and social collateral are juxtaposed with the registration (or public encoding) systems now available, we then can envision the four possible types of property registration as suggested in Figure 1.

![Figure 1: Four Possible Types of Property Registration](image-url)
In Box 1, we see illustrated the present registration problem. From Box 1 to Box 2 (Arrow A), we see illustrated the movement toward technological means for the public registration of certain physical property. Box 3 is represented by the relatively low-tech (e.g. word-of-mouth) use of social collateral as a representational tool in the micro-finance example. But what about the movement toward Box 4 (Arrows B and C)? What would it take for both a technological and a social collateral-encoded system of property registration to move from local to global (movement from Boxes 2 and 3 to Box 4)? Could we then expand the use of both technological and social “encoding” to surmount the heretofore intractable effects of the registration problem? Finding the answer to this question is a worthy research problem.

What If

In our current world, where information technology now includes: 1) extensive communications (67 percent of global population will have mobile phone coverage by 2019[18]), and 2) high-trust assets transfer capability (e.g. blockchain[19]), it now is possible to begin to conceptualize a solution to the registration problem that circumvents local-government corruption utilizing information technology. Hence, this thought experiment.

What if we were to re-conceptualize certain aspects of the registration and capital formation problem as a constructive thought experiment[20] to draw out this new possibility[21] in a way that enables us to reimagine and rethink capital formation despite the corruption that tends to be endemic in many cultural, historical, and human situations?

What if a WWPR would empower a global institution to maintain titles, deeds, articles of incorporation, etc.? Countries which seek to improve their productivity despite corruption would enter into a WWPR Compact (sponsored by, say, the UN) whereby they would agree to treat WWPR records as legitimate, thereby making it possible for capital to be secured within these countries. Of course, this would require that the legal system in each country also be amended to enable registered WWPR property rights to be enforced. Entrepreneurs and small business persons within these countries could register personal and juristic (e.g. corporate) property; excluding—at least at the outset—real estate, water rights, and other tied-to-the-land-based assets, which most likely would be subject to precedence-based local law. An international financing entity created or extended for this purpose (e.g. a World Bank entity such as the International Finance Corporation (IFC)) might have its mandate extended or another such agency created specifically to provide capital
according to effectiveness norms developed (for example, in microfinance).

Is this proposal worthy of consideration? Yes. I believe that the capital/corruption/registration-problem nexus requires forward-thinking now. Is this thought experiment realistic? Candidly, I don’t yet know. A great deal more study and specification will be necessary. However, it is my hope that the WWPR thought experiment will stimulate far-reaching discussion that better prepares us for a world where capital formation and corruption can better be decoupled. If decoupled, then by removing the corruption/registration obstacle, much more capital can be put to work for the benefit of all concerned. A Worldwide Property Registry is a necessary next step for global economic development.

ENDNOTES


[4] Analysis suggests that country per capita GDP and country rating on the Corruption Perceptions Index are over 70% correlated.


[8] Ibid.


[10] Ibid.


[14] Blockchain. By allowing digital information to be distributed but not copied, blockchain technology created the backbone of a new type of internet. Originally devised for the digital currency, Bitcoin, the tech community is now finding other potential uses for the technology. [https://blockgeeks.com/guides/what-is-blockchain-technology/](https://blockgeeks.com/guides/what-is-blockchain-technology/)


