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Measuring China's economic reform progress☆

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1. Introduction

China's post 1978 economic reforms have frequently been described with Deng Xiaoping's phrase about "crossing the river while feeling the stones one by one". The phrase indicated that the leadership had no clear goal other than to accelerate the country's economic growth by doing whatever worked. That in fact is an apt description of the economic reform process in the 1980s and the early 1990s. Opening up to foreign trade and investment, returning farming to households, and making industrial inputs available on the market leading to the township and village industry boom, were all ad hoc measures that worked brilliantly in raising the GDP growth rate. There were also negative consequences to some of these moves mainly in the form of rising inflation and corruption and that led for a time to a retreat from the ad hoc dismantling of the centrally planned command system.

It is not surprising that these early reforms were successful. The return to household farming had been tried before and enterprise managers and planners knew that the ideology driven anti foreign trade policies were limiting their ability to promote growth. The freeing up of the market for industrial inputs was more of an experiment driven by the frustrations in getting needed inputs in a timely fashion through administrative channels and the boom in township and village enterprises that resulted came as a surprise. Economic reform in this early stage was designed to eliminate the more obvious shortcomings of the centrally planned command economy and an overall conception of where reform was heading was not necessary. In broad brush terms, the Chinese approach was consistent with the "theory of the second best".[1] When one or more of the assumptions needed for an efficient market economy is missing, the correct strategy is not necessarily to make sure that all of the other criteria are met. Getting to an efficient market economy is more of an ad hoc experimental process.

But going beyond the early reform efforts, China did need an overall conception of where the reforms were heading. The retreat from the conservative reaction to reform of 1990-1991 ended with Deng's trip to the south and at the 14th Party Congress in 1992 the country set a clear goal of creating a "socialist market economy" that was to largely replace the centrally planned command system. The Congress did not define in any comprehensive way what a socialist market economy would entail. With the benefit of hindsight

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[1] Richard Lipsey and Kevin Lancaster, "The General Theory of Second best", *The Review of Economic Studies,* Vol. 24 No. 1 (1956-1957) pp. 11-32.

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looking back from a quarter century later, the goal became creating a market system much like that in the high income countries but with substantial state ownership of industrial and service enterprises and a leading economic as well as political role for the Chinese Communist Party.[2]

Stating the goal in that general way, however, does not give one a guide as to what China had to do to create a modern efficient socialist market economy. There is a literature from the first half of the 20th century, however, that does try to spell out how a socialist market economy would work. It was written originally to counter the argument of scholars that argued that a socialist economy could not be efficient. Oskar Lange and Abba Lerner argued that it was possible to create an economy that was just like a capitalist market economy except ownership would rest with the state (or "all of the people") rather than private individuals. The key stumbling block to efficiency was that efficient outcomes required that enterprise managers maximize profits and private ownership of these profits provided the incentive to follow this goal. Lange and Lerner, however, countered that the managers of state owned enterprises could be simply ordered to maximize profits even though it was the public as a whole who ultimately receive those profits.

Lange and Lerner, therefore, solved the problem of whether a socialist market economy could be efficient, but neither they nor the Chinese Communist Party or the Chinese government has spelled out in an operational way what kinds of institutions needed to be created for a market economy to work in a way consistent with the theory or the goal of efficiency. That in turn has made it difficult for scholars and other observers to judge whether China is or is not making good progress toward achieving the goal of an efficient modern socialist market economy. Instead scholars and observers have focused on one or another element of a market economy and judged the progress of reform on the basis of one or two indicators—the share of state owned enterprises in industry, the degree to which financial markets in China behave like those in high income countries, or even whether China is opening up its capital markets to the outside world.

2. The components of market reform

The remainder of this paper, therefor, will begin by describing the major institutional reforms that are essential for an efficient market economy. The essay will then turn to a brief analysis of this writer's view of the degree to which China is succeeding in creating these institutions. More important than this writer's personal views, however, is whether progress in the key areas can be measured in comparatively objective quantitative terms or whether relevant quantitative measures in key areas are not possible at all.

The major components involved in moving from a centrally planned command system to a market system are as follows:

1. Goods and services must be exchanged on markets at market prices as contrasted to being administratively allocated by a government agency. This component is readily measurable.
2. Those markets should be competitive and only influenced by regulations and other kinds of government interventions when those regulations and interventions correct for market failures—e.g. correcting for environmental diseconomies, monopoly power, or social welfare failures. Where regulations are deemed necessary, they should be administered in a way that minimizes rent seeking by those responsible for implementation of the regulations.
3. Financial markets must be efficient mobilizers of savings and allocators of investment. There are many components to making this happen.
4. Markets must be stable (no inflation at a level that leads to major distortions in investment decisions) and maintenance of stability should be through indirect monetary and fiscal policy, not through direct administrative controls on financial institutions.
5. To enforce property rights for the private (and public) sector and to administer regulation efficiently and fairly, there must be an objective and fair arbiter of disputes over property rights, business disputes with other businesses, and business disputes with the government. In high income countries this is typically provided mainly by a legal system that is fair, efficient, and independent of the interested parties. Independent in the most advanced legal systems, means independent of the executive branch of the government as well independent of particular private interests.
6. Managers of the production of goods and services need to follow some approximation of the profit maximization rule and profit maximization should be achieved by efforts to raise output, cut costs, improve quality—not by lobbying for favors from the government (import protection, tax breaks, etc.). A major question today is whether China's decision to strengthen state ownership and Party influence over decisions of corporate management is consistent with these criteria.

3. Making goods available on the market

In many cases making goods and services available on the market at market prices involves little more than simply allowing producers and their customers to get together and agree on a price. In other cases making goods available on markets involves changes in the organizations and institutions that distribute the goods nationwide. Local farmers' markets are good for exchanging goods between nearby families and villages but getting millions of tons of grain from the farm to urban markets requires organizations to collect and store the grain, transport it to the cities, and distribute it to retail outlets. These market supporting organizations do not necessarily spring up overnight. Furthermore institutions or rules of behavior governing these organizations in a

[2] There is a large literature by scholars that attempts to define what a "socialist market economy" in general terms (see, for example, Julan Du and Xu Chenggang, "Market Socialism or Capitalism: Evidence from Chinese Financial Market Development," IEA Round Table on Market and Socialism, April 2005).

market economy are very different from the rules of the command system. There was at least one case in Eastern Europe where reformers initially simply freed up all markets and abolished the institutions responsible for managing distribution under the command system. If this decision had been allowed to stand, there would have been chaos for a time before new organizations and institutions could be created.

In China's case, this transition to a market based distribution system proceeded steadily beginning in the late 1970s and was largely completed for goods and services by the mid-1990s. Markets for unskilled and skilled labor with market set wages also developed during this period while markets for land took longer and rural land markets were still a work in progress in 2018. Capital markets also took time and it wasn't until well into the twenty-first century that one could say that China had created markets and the supporting institutions for functioning capital markets. The markets for goods and services evolved almost instantaneously in the countryside but urban markets took much longer with industrial inputs partially freed up in 1984 with a portion of goods sold on markets and market prices and another share distributed administratively at state set prices. This dual price system, however, disappeared over time as the changed incentives of producers made it increasingly difficult for purchasers to get what they needed in a timely way through the administrative system.

Progress toward a market system in this area could be and was readily measured by simply counting the number or value of goods and services available on the market at market set prices. By this measure China had a full market system for goods and services and for labor and urban land by the mid to end of the 1990s. Capital markets have taken longer and there was still substantial state involvement in the allocation of capital in the first decade of the twenty-first century. We will return to issues related to capital markets in the section on finance below.

4. Competition and regulation

There are standard ways of measuring whether markets are competitive or not such as the Herfindahl-Hirschman (H-H) Index but there are not many studies that have gone in depth into the competitiveness of Chinese industrial and service sector markets. One study that does attempt to measure competitiveness in Chinese industrial and service sectors shows mostly small changes, both increases and decreases in competition and many sectors showing little change over the 1998-2009 period, but this is too short a time to expect major changes in the level of competition. In addition, using Zipfian parameters to correct for bias in the H-H index, as is done in the one major study that uses them, cannot be readily compared with other countries.[3] Another study looks at the impact of the rise of Chinese firms on the competitiveness of international markets around the world. The paper concludes that the entrance of Chinese firms has contributed to increasing international market competitiveness in most industries with the notable exception that concentration increases where Chinese state owned industries dominate.[4] A systematic measure of the changes in competitiveness in China over the reform period and in comparison with other economies will have to wait for other economists to take up the challenge. Given the number of firms in most industrial sectors in China, however, there is little doubt that there is vigorous competition. Under the centrally planned system, large numbers of enterprises did not necessarily mean more competition because even smaller local firms typically were given a monopoly over their local market. That system, however, was abolished in the 1980s and local government attempts to recreate local monopolies was largely suppressed by the 1990s. Competition today becomes less the case when one moves to certain service sectors such as those dominated by the large internet based firms and those in telecommunications. The dominance of a few firms in these areas is not unique to China.

The regulatory institutions in which enterprises operate can in many cases have a greater influence for better or worse on the efficiency of markets than the degree of concentration. There is little question that Chinese industries and services face a level of regulatory involvement that is very high in comparison with the better managed high income market economies. Furthermore, local officials and government agencies often have a high degree of discretion in administering these regulations. Some of these regulations are needed to control external diseconomies such as pollution, but many are left over from the command era. Simply counting up the number of regulations that a firm must deal with would not be a meaningful measure of their impact on the efficiency of the market. Fortunately the World Bank over a decade ago devised a number of indicators that indirectly measure the regulatory environment. They are based on surveys of business people and most require the business person to answer measurable questions, not just give a general view of whether the issue is handled well or poorly in comparison to some other country.

The data for China from the World Bank's Doing Business survey is presented in Table 1.

China overall ranks below, usually far below, all of the high income market economies of North America, Western Europe, plus Australia, New Zealand, and Japan. Singapore and Hong Kong, the closest to unfettered free market economies rank second and fifth by comparison. The components are more informative than the overall ranking. Of the seven components, China during this eleven year period has seen dramatic improvement in enforcing contracts and less dramatic but still improvement in closing a business either through the bankruptcy laws that began to take effect in the 1990s or by other means. There has also been improvement in the ease of getting credit. On the other hand the country saw dramatic worsening in "trading across borders" (foreign trade procedures for example) and substantial worsening in registering property and protecting minority interests.

The components most likely to be related to the regulatory environment are those involving foreign trade, registering property,

[3] Chong-en Bai, Jie Mao, Qiong Zhang, "Measuring market concentration in China: the problem with using censored data and its rectification," *China Economic Review,* Vol. 30, 2014, pp. 432-447.

[4] Caroline Freund and Dario Sidhu, "Global Competition and the Rise of China," Peterson Institute for International Economics, Working Paper WP17-3, February 2017.

Table 1
China: doing business overall ranking.
Source: World Bank, *Doing Business* (www.doingbusiness.org).

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Overall ranking	93	83	83	89	79	91	91	96	90	84	78
Registering property	21	29	30	32	38	43	44	48	37	43	42
Resolving closing	75	57	62	65	68	75	82	78	54	55	53
Enforcing contracts	62	20	18	18	15	16	19	19	35	7	5
Protecting minority interests	83	83	88	93	93	97	100	98	132	134	123
Trading across borders	38	43	48	44	50	60	68	74	98	96	96
Paying taxes	168	168	132	130	114	122	122	120	120	132	151
Getting credit	101	84	59	61	65	67	70	71	71	79	62

closing a business, and paying taxes. In addition in the 2016 report China ranked at 172 in dealing with construction permits and 93rd in starting a business. These latter two were not included in Table 1 because they were not part of some of the earlier surveys. There has been improvement since 2006 in only one of the four for which data were available for the whole period. Paying taxes hasn't worsened but it is at a very low level throughout. Improvements in getting credit are probably more related to improvements in the banking system than changes in regulation and the ranking of contract enforcement may in part reflect improvements in the legal system that we will deal with later.

Clearly China has what most high income market economies would consider to be excessive regulatory activity for an efficient market economy, most no doubt implemented by local officials. The level of regulatory activity and the lack of uniformity in the application of regulations to individuals and firms also is an important contributor to why China ranks 77th out of 180 countries in Transparency International's 2017 Corruption Perception Index. Local officials around the world use regulatory delay among other methods to extract side payments from individuals.

5. Financial markets and macroeconomic stability

The efficient functioning of financial markets is an essential component of any modern market system. Financial markets, however, are fundamentally different from markets for goods. Financial markets are created by people to facilitate the saving of money and converting that saving into productive investment. There are no biological, engineering or other scientific rules that govern the production of financial instruments. They are created by laws written by humans that are administered and enforced by humans and can take many different forms. There is thus no really agreed on single ideal model for a financial system. There are a variety of ways of converting savings into investment and the key is that this should be done easily and efficiently and should not lead to macroeconomic instability or to individuals being cheated out of their financial assets by other individuals. On a more general and abstract level there must be intermediation between savers and investors so that investors do not have to do their own saving. For intermediation to work there must in turn be trust that when a saver provides resources to an intermediating organization or directly to an investor the resources will be returned (usually with interest) sometime later.

Prior to the economic reform period, China's financial system consisted mainly of one large mono-bank. The role of that bank was primarily to back up implementation of the central plan and to provide a convenient place for enterprises and individuals to deposit money. This bank had little to do with maintaining macroeconomic stability. That was the job of the State Planning Commission and other government agencies that determined how many consumer goods were to be produced and then set wage levels and farm purchase prices so as to maintain consumer price stability. In this system, when an enterprise required a loan in order to purchase an input, the mono-bank simply issued the loan if it was for something called for in the plan.

In the early 1980s this banking system was restructured separating four state owned commercial banks from the central bank. The system then looked more like a modern banking system but in practice the banks and the central bank continued to behave in ways not unlike those under the mono-bank. When state enterprises required a loan, and almost all loans went to state owned enterprises, the commercial banks issued the loan without any due diligence to determine whether they were credit worthy or not. Credit worthiness was not even an issue under the command system because high industrial prices ensured that most industries made substantial profits and those few that did not were kept alive because only the State Planning Commission could order an enterprise to close. With the increasing dominance of market determined prices, however, more and more state enterprises began making losses and were unable to repay their loans.

This situation continued into the mid-1990s with the state owned enterprises launching large investment drives unrelated to any coordinated national plan (central plan targets had been mostly removed), the banks accommodated them with loans and the central bank in turn accommodated this increase in loans. The share of non-performing loans held by the banks rose steadily. The resulting rapid increase in the money supply led to bouts of inflation (in 1988-1989 and 1993-1995) that were brought to an end by government setting reduced lending quotas, not by indirect means such as raising interest rates. Indirect means would not have succeeded in reining in the loans because the state enterprises' goal was to expand scale rather than maximize profits. At the same time, that large banks all were in effect bankrupt because their non-performing asset portfolios far exceeded their capital.

In 1993, however, the government appointed Deputy Prime Minister Zhu Rongji concurrently as head of the central bank. This was the first appointment to the central bank of someone powerful enough to stand up to the state enterprises and inflation was quickly rung out of the system. State enterprises at that same time were making heavy losses (the freeing up of prices revealed their fundamental weaknesses). Zhu Rongji closed down large numbers of these loss making enterprises and forced those surviving to shed tens of millions of surplus employees. He also indicated to them that many more would fail unless they learned to compete and make profits. To back this up, he in essence agreed to American and European terms and joined the World Trade Organization further opening up international trade and putting even more competitive pressure on Chinese firms. The result of these, together with the expanding private sector in manufacturing and services together with the privatization of housing meant that indirect controls (e.g. interest rates) became potentially more effective. The cycles of investment booms followed by retrenchment were moderated. With these reforms in place, the banks were then recapitalized by the government.

The further development of macroeconomic policy and financial markets after the year 2000 took two forms. With macroeconomic policy the general trend was toward the gradual freeing up of administrative controls over interest rates and bank lending and to a lesser degree capital flows in and out of the country. In some respects this freeing up of administrative controls simply accommodated what the banks and others were doing from the bottom up by going around these controls by creating a shadow banking system with wealth management products not subject to the controls. Even before the rise of shadow banking, the commercial banks on their own were steadily strengthening and modernizing their procedures.[5] As macroeconomic policy makers gained experience their skills in using indirect controls to manage the financial markets and control inflation also became steadily more sophisticated.

The other reform path was to steadily expand the kinds of financial institutions that made up the financial sector. The Shanghai and Shenzhen stock markets were created in 1990 but in the early years they were little more than vehicles used by large state owned enterprises to raise money from non-government sources. The listings and who was allowed to list steadily expanded over the years and the formal legal requirements for listing on paper became increasingly more like those of stock markets found in North America, Japan, and Europe. Writing laws and regulations much like those in the high income market economies, however, is only the first small step in creating a stock market that provides major reliable financial support to the economy. Chinese regulators have struggled to wring out of the system the many distortions and illegal activities that characterize most stock markets in their early stages. The people that invest in the stock market are also inexperienced in how to make the best use of it and are often more speculators than investors. Others are technically skilled and able to manipulate markets. The Shanghai Composite Index, for example, in 2009-2014 averaged a high each year that was 50 percent above the low of that year. The same figure for the Shenzhen Composite Index was 61 percent.

The other major financial development was the growth of the insurance sector. Between 2002 and 2015 the assets of China's 194 insurance companies (in 2015) rose to RMB12.4 trillion, nearly 20 times the level of 2002 (RMB632 billion). Growth of this magnitude not surprisingly has been accompanied by practices not entirely consistent with maintaining a reliable foundation for insurance policies. The insurance companies connected with Anbang and HNA, for example, have gone on massive investments around the world financed by equally large borrowing. Insurance policies are only as reliable as the assets that back them up and financial conglomerates using insurance companies mainly as a vehicle for raising money for speculative financial activities can get into financial and other kinds of difficulty as has been the case with Anbang and HNA. This problem is not unique to developing countries (e.g. AIG in the US) but it is typically a much bigger problem for companies located in developing countries.

On the one hand, the large bank core of China's financial system and the macroeconomic management of that system by the central bank have become increasingly sophisticated and skilled since the late 1990s. The biggest problem remaining in this part of the financial system is that political considerations still play a substantial role both with respect to many state owned enterprises but also with respect to the financing of local governments. The result is more debt than is healthy in the state enterprise sector and with local governments. This debt may be a problem for the banking system, if not now, then possibly in the future. That said, the size of the banks' non-performing asset portfolio now and probably in the near future is a tiny share of the enormous non-performing debt that existed in the mid-1990s. Even that earlier debt, however, was managed in a way that avoided a major financial crisis.

In contrast to the banking sector and the central bank, the newer institutions, the stock exchanges and the insurance companies, are still in the early stages of their development and they are far from being stable and efficient contributors to the reliability of the financial sector. The laws that in theory govern these institutions are modern, but the provisions of the law are difficult to enforce and there are many sophisticated financial operators trying to take advantage of that situation. Both the regulators and the Chinese population as a whole lack experience with these newer financial institutions, and that makes the job much easier for those trying to manipulate the system.

Could the progress of the financial system be measured by a single quantitative indicator? The stability of the system or the lack thereof can certainly be measured as can the non-performing assets of the banking system. Stock market volatility is readily measurable. The harder part would be combining these and perhaps other trends in the sector into one or two measures. More likely the indicators will have to be multidimensional. Determining which indicators belong in this multidimensional system is beyond what is possible in this essay.

6. Profit maximization, property rights and the legal system

Protection of property rights of businesses and individuals is seen by most economists as an essential component of a well-functioning market system. This is certainly the case for the private sector where protection of property rights ensures that profit

[5] James Stent, *China's Banking Transformation: The Untold Story* (Oxford University Press, 2017).

Table 2
Industrial enterprise revenue (billion RMB).
Sources: National Bureau of Statistics, China Statistical Yearbook, 2003, p.459, 2016, Table 13-1. "Other" is made up mainly of limited liability enterprises that are not sole state funded or sole private funded (24.8% of total GVIO and 99% of other).

	2001		2015		2015/2001
	GVIO	%	GVIO	%	%
State Enterprises	1722.919		4520.2		262.4
Shareholding	1269.834		9963.1		784.6
Sole State LLC	514.226		4661.8		906.6
Joint	85.076		27.2		32
Subtotal	3592.055	37.6	19172.3	17.3	533.7
Collective & Cooperative	1304.745	13.7	822.6	0.7	63.5
Private	876.089		38639.5		441
Hong Kong, etc	1184.719		9692.6		818.1
Foreign Funded	1537.372		14877.2		967.7
Subtotal	3598.18	37.5	63209.3	57	1756.7
Other	1049.716	11	27781.1	25	2646.5
Total	9544.696	100	110985.3	100	1162.

maximizers will actually receive the profits. The private sector, as the data in Table 2 makes clear, continues to grow as a share of industry. Figures for the service sector are not readily available in a similar format but would tell a similar story of private sector dominance in sectors such as retail and wholesale trade but not in banking or rail and air transport where state owned firms still dominate.

The state owned sector, however, also requires protection from predatory attacks by the government. Powerful business interests themselves can be predatory in the sense of going beyond legal or legitimate business practices to seize or undermine another business. As was the case with the financial system, the system for protecting property rights is a human construct unconstrained by engineering or scientific laws. In most market economies, the primary protection against attacks on legitimate property rights is provided by the legal system and courts of law with judges that follow the law, not the directions of politicians or powerful business interests. It is these judges (and sometime juries) who decide business disputes and whether property rights have been violated usually after hearing arguments by lawyers for the disputing parties make their case.

For China at the outset of the reform era in the 1980s, this requirement for a well-functioning market did not exist. The Chinese legal system during the Cultural Revolution was abolished as were all lawyers. That did not mean, however, that there were no property rights in China in the early 1980s or even the 1970s although there were few private property rights. The Rural Peoples Communes and their subunits had collective user rights over a particular geographic area and those rights were to a degree protected. Land was not generally taken from one Commune to give to another and the government took the land mainly only for high priority projects like large dams. Similarly with the development of local industries, later called township and village enterprises, these enterprises had a kind of right of collective ownership usually in combination with certain rights over the enterprise by the local government. Protection of these land and local enterprise rights largely rested on the self-restraint of higher levels of government based on their understanding of what a well-functioning economy required or by their concern that violating these rights would lead to political instability.

With the rise of domestic private enterprises and foreign direct investment enterprises, the issue of a more formal recognition of property rights became essential. Again this was handled initially and to some degree up to the present by the government issuing regulations (or writing passages in the constitution) that recognized these rights and the need to protect them. But in more recent years and particularly since the beginning of the 21st century, property rights protection and commercial dispute settlement have increasingly rested with the legal system. There has been a major expansion in commercial court cases as the data in Table 3 indicate.

As the data in Table 2 indicate, Chinese businesses and individuals are going to the courts to settle disputes in rapidly increasing numbers. The data, in contrast, also show that administrative cases accepted by the courts are not large. Administrative cases generally involve disputes between private parties and the government and the likely explanation for the small number is that it is very difficult to win a case in the courts against the government. A rapid expansion in the number of lawyers has accompanied the

Table 3
Judicial system: quantitative indicators.
Sources: National Bureau of Statistics, China Statistical Yearbook, 2003, p.836, 2011, Tables 23-29, 23-31 and 23-30, 2016, Tables 24-18. 24-19 and 24-20.

	2002	2010	2015
Cases accepted by courts			
Contract Disputes	2266695	3222555	6013386
Economic rights disputes	869013	1444887	2325392
Administrative	80728	136353	220398
Number of lawyers	136684	195170	297175

increase in commercial court cases and the courts themselves, originally staffed by individuals with little training in the law, now increasingly are made up of judges who are so trained.

It is still the case, however, that many businesses in China seldom go to the courts. As an important study by Yuhua Wang has shown, it is the regions of China that have received the most foreign direct investment that have done the most to improve the court systems.[6] He demonstrates this with a regression that shows that per capita expenditures on the courts are highly correlated with the areas that have the most foreign direct investment. Areas dominated by state owned enterprises and domestic private enterprises rely for property protection and the settlement of commercial disputes in general on politics, personal relationships, and corruption. The foreign direct investment firms mainly come from areas where legal systems are strong and they are uncomfortable operating in an environment where that is not the case. Many countries also have corrupt practices laws that apply to their companies operating abroad as well as at home. Wang also shows, by using data from enterprise accounts, that foreign firms bribe less than the mean of all firms and smaller domestic private firms bribe the most (bribery measured indirectly by such things as the money spent on entertainment).

The combination of political changes such as including the rights of the private sector into the constitution and including private entrepreneurs in public political roles together with the improvement in the legal system (in the commercial sphere), indicate that the country is strengthening the protection of property and settling disputes within the business community in a fairer and more efficient way. Where the government is directly involved in the dispute, however, the courts still do not play much of a role. It is clearly the case as well that many and probably most disputes, even in the commercial sphere, are still settled outside the judicial system. It is also the case that the Party and powerful political figures can often overrule the courts. It is not clear whether the increasing role for the Party in national policy and enterprise management will further weaken the ability of the courts to be more involved in legal disputes of all kinds.

One could probably develop a quantitative index of the change in the quality of the court system building on works such as those of Yuhua Wang. Such an index, based on comparatively hard data as contrasted to expert or business people's perception, would probably be more reliable than what we have now, but that is a task for the future. To get at the fundamental issue of whether the courts will ever have much authority over government units or local Party intervention in private disputes, however, one would have to have data on how often the courts were overruled by politicians and that data is certainly not readily available.

7. Profit maximization and party involvement

If the objective function of enterprise management is to maximize profits, in a market system this will lead, subject to a variety of assumptions, to the most efficient outcome in the Pareto sense that no one can be made better off without making someone else worse off. Subject to various assumptions, this can be proved mathematically and it is why the early socialist market theorists, Oskar Lange and Abba Lerner, felt the need to prove that a socialist system without private ownership could still maximize profits. Their answer was that enterprise managers could be ordered to maximize profits. One did not have to be the owner of the enterprise and receive the profits to be so motivated.

In the real world of capitalist market economies, of course, managers often modify the profit maximization rule in many ways. Furthermore, maximizing profits only leads to efficiency if greater profits are achieved by increasing sales, cutting costs, developing new products, etc. Maximizing profits by lobbying the government for subsidies of various kinds does not lead to efficiency, often quite the opposite. There is also a difference between maximizing short term profits and long term profits with latter being the more productive choice. In some sectors such as finance the system can be manipulated to achieve large speculative profits that can actually lead to recessions.

The question here is whether Chinese enterprises follow something approaching a profit maximization rule or are their objectives very different. And how have they evolved over time with respect to this rule. During the period of the command economy, profit maximization was not followed at all by enterprise managers. Their job was to meet and surpass plan targets. Most firms made profits because the government set prices in a way that guaranteed profits at least for most industries. Most profits were then siphoned off into the government budget. Enterprise salaries and wages were unrelated to profits. This system continued into the 1980s in industry but in agriculture the return to household based farming meant returning to a system of income or profit maximizers because the farmers kept the net income from what they produced.

The situation was different in industry in that the dominant state owned sector in the 1980s continued to receive large subsidies in the form of low state set prices for their inputs. The steady disappearance of these subsidized prices ended that source of subsidies and when by the late 1980s and 1990s enterprises were allowed to keep a larger share of the profits earned, increasing profits became part of the management objective function. By the 1990s as prices were increasingly determined by the market, however, more and more enterprises began making losses and turned to the banks for loans and the government for subsidies. In effect the objective became to make sure one had the political support needed to ensure that one got the loans needed to cover losses and that the loans didn't really have to be paid back. The portfolio of non-performing loans in the banks in the 1990s officially reached 25 percent of total assets and many outside observers believe the true figure was much larger. In effect Chinese enterprises were firmly back in the world of soft budget constraints where the goal was to keep afloat and keep expanding but with little effort to deal with bloated employment rolls and other cost inefficiencies that would raise profits or reduce losses.

By the late 1990s with the actions of Prime Minister Zhu and the support of President Jiang described above, state enterprises

[6] Yuhua Wang, *Tying the Autocrat's Hands: The Rise of the Rule of Law in China* (Cambridge University Press, 2015).

were forced back into a world where their survival meant that they had to make profits and do so with greatly reduced subsidies from the government. At the same time the private sector in industry and services was beginning to become an important part of the economy and they were natural profit maximizers to some degree. The private sector share of the economy has continued to grow ever since and was increasingly given recognition and legitimacy by the government and the Chinese Communist Party.

There were, however, important constraints on the degree to which state owned and controlled enterprises moved toward profit as the key element in management objective functions and some of these constraints applied to the private sector as well. In the state owned and controlled sector management is selected by the Organization Department of the Party and management personnel frequently shift back and forth between government and enterprise jobs. The Organization Department makes effort to get technically qualified people into management positions, but fundamental loyalty to the Party is always the first criterion. From the managers' perspective, their careers depend upon staying in the good graces of the Party and they are promoted and demoted according to their ability to do so.

In the private sector the Organization Department does not play a direct role in selecting management, but given the highly regulated nature of the Chinese economy, success in the private sector often depends critically on having a close relationship with the government and the Party. Furthermore, private enterprises also have Party Committees that management ignores at its peril.

A case can be made that from the late 1990s for nearly two decades the objectives of enterprises particularly in the private sector but also in the state sector became increasingly profit and efficiency oriented with political goals receding. That is clearly no longer the case after the 19th Party Congress. The 19th Congress and the speech of President Xi Jinping put particular emphasis on the importance of strengthening Party leadership over both the state controlled and the private sectors. The state controlled sector itself was also going to be given greater emphasis.

The question then becomes how this shift back toward greater involvement of the government and the Party in enterprise affairs and objectives is likely to affect enterprise objectives? Will those altered objectives be consistent with an enterprise objective function that emphasizes some approximation of profit maximization? If China were a typical developing country, the answer would be clear. When the government gets directly involved in enterprises and particularly in state owned enterprises, the survival of those enterprises involves governments pressuring them to hire large numbers of unneeded employees and channeling a portion of profits to powerful politicians for their political or personal use.

These same kind of pressures exist in China although the vigorous anti-corruption campaign has probably reduced the ability of government civil servants to extract rents from both state and private firms. The perceptions of corruption in China as measured by Transparency's Corruption Perception Index, however, has only raised China from 80th out of 175 countries in 2013 to 77th out of 180 countries in 2017. As long as China retains a myriad of business regulations with implementation of them often at the discretion of local officials, corruption is likely to remain part of doing business. The corruption perceptions index, however, is not a good measure of the degree to which the businesses of a country depart from a focus on making their businesses run as efficiently as possible. Countries like South Korea had a considerable level of corruption during the early high growth years but corruption was not allowed to distort business strategies away from development strategies designed to achieve maximum performance. The same can probably be said of China during the past four decades.

Probably more important for business will be how the Party defines the objectives it expects enterprises to pursue. For many years the single most important success measure for government officials was their success in raising local GDP. Maximizing GDP growth is not the same as maximizing profits for efficiency purposes, but it is closer to that objective than maximizing resources for politicians or maximizing employment. Going forward it is not clear what the objectives of enhanced Party involvement in the economy will mean. Encouraging enterprises to get more involved in the Belt and Road Initiative, for example, may be consistent with profit maximization for many enterprises particularly in the construction and construction materials sectors. Directing investments toward politically favored individuals or regions is less likely to be compatible with profit maximization. If enterprise Party Committees are given considerable discretion over how and when they intervene in management decisions, all kind of local politics could enter management objective functions in both the public and private sphere.

Clearly the Party and the government are going to have multiple objectives since that is true of political leadership in all countries. They can implement these multiple objectives first by investing government controlled resources in achieving them. They can also design national regulations applied to all enterprises that will require management to internalize the costs of such things as the environmental diseconomies that the enterprises cause. Or will the government rely on enterprise Party Committees to ensure that management includes the nation's multiple objectives in their objective functions? If the last method is chosen and enterprise Party Committees have wide discretion in implementing them, there is reason to expect a considerable loss in management's ability achieve a high level of enterprise performance. On the other hand, attempting to achieve the government and Party's multiple objectives primarily by increasing the number and scope of regulations could reinforce the current view of Chinese businesses that the regulatory regime already inhibits business development more than is virtually all high income countries.

There is no readily apparent quantitative index that could measure how far the businesses of a country deviate from following the rule of profit maximization or, to put it differently, the goal of trying to make their business perform to its maximum potential unencumbered by politically motivated interventions by government. The lower level of productivity of the state sector compared to the private sector, as numerous studies of Chinese industry show, would be a measure of deviation from the profit rule for the state sector, but not if the private sector as well was subject to pressures to deviate from the profit rule.

8. Conclusion

Given the above analysis, what can one conclude about the progress China is making toward the creation of an efficient socialist

Share of goods distributed through the market with tradeable goods prices similar to world prices (Good)+
Level of competition in most markets (Good in most markets)+
Market regulatory system (Fair to Poor)
Quality of the banking system (Good)+
Financial Stability (Good)+
Stock market, insurance (Fair to Poor)
Protection of urban property rights (Fair to Good)+ rural property rights (fair)
Commercial legal system (Fair)+; when government is party to the dispute (Poor)

Chart 1. Evaluating the measurable/technocratic components of China's market system (+ indicates continuing improvement in 2018; - indicates worsening as of 2018)

market system that is broadly comparable to what capitalist high income countries have achieved? As this essay has attempted to demonstrate, for many of the components of a market system, socialist or capitalist, it is possible to come up with objective quantitative measures of the progress that is being made. Chart 1 gives an overall summary of what the writer of this essay concludes about what these data show. Others may and probably will disagree with this part or all of this assessment and they may also suggest better ways of measuring progress in the various areas. That is all to the good because the above measures are simply a first attempt by one analyst

The primary conclusion from this chart as now presented is that China has made considerable progress in creating an efficient socialist market economy in many areas ranging from banking and macroeconomic policy to the day to day functioning of most goods and services markets. In the areas ranked "good" in the Chart, progress has come largely from the increasing technical sophistication of these institutions, a level of sophistication and performance that far exceeds what one typically finds in low income and low middle income developing countries and even many high middle income countries where China ranks today. Even the legal system, starting from next to nothing at the beginning of the reform period, has come a long way at least in dealing with commercial disputes where the government is not directly involved.

Where the market system still performs poorly, one underlying reason is that those managing these organizations together with the Chinese population at large have not yet had much experience with the complexities that these sectors present. This is particularly true of the stock and insurance markets and also of international capital markets.

The more important cause of why some sectors perform poorly, however, is when the interests of the government and the interests of local government officials are directly involved. The elimination of excess regulations is typically resisted by the officials administering them around the world. Deregulation puts many of them out of a job and it also eliminates a source of income for those willing to use their regulatory power to extract rents. The defense of these regulations is that they are needed to prevent enterprises and individuals from doing harm, and that is often true. But those officials that benefit from these regulations are not usually the best judges of whether they are needed or not. In a similar vein, the loser in court in a commercial dispute is never going to like the outcome. If the loser has the power to overrule the court, something that is often the case in China when the loser is a government entity, the decision of the court becomes meaningless. Even if the loser is a private party but has the support of a powerful local politician, the court's decision can frequently be overruled.

It is in this context that the decision of the 19th Party Congress decision, not only to strengthen the role of the Party with respect to government activities, but to increase the role of Party Committees in both public and private enterprises becomes a concern. Everything will depend on how this enhanced Party Committee role will be defined. If it is mainly to be alert to situations where the enterprise is refusing to comply with laws and regulations concerning the environment or the treatment of workers, for example, that would not obviously impinge on management's right and duty to determine appropriate enterprise development strategies and individual work assignments. If instead the Party Committee is to become actively involved in the full range of management decisions, that is not likely to end well even if the Party Committees are made up of individuals far more skilled than those involved in the "Red versus Expert" conflicts in the pre-reform past. As this essay is being submitted, there is as yet little information of which of these paths greater Party involvement in enterprises will take.

The Measurable-Technocratic Elements of the Market System (+ = improving; - = worsening

- Share of goods distributed through market with tradable goods prices similar to world prices (Good)+
- Level of Competition (Good in most markets)+
- Regulatory system (fair to poor)
- Quality of Banking system (Good)+
- Financial stability (Good)+
- Stock market, insurance, etc (fair to poor)
- Protection of Urban Property rights (fair to good)+; Rural (fair)
- Commercial legal system (fair)+; when government is a party to a dispute (poor)