NBER WORKING PAPER SERIES

CAPITALIZING CHINA

Joseph Fan Randall Morck Bernard Yeung

Working Paper 17687 http://www.nber.org/papers/w17687

NATIONAL BUREAU OF ECONOMIC RESEARCH 1050 Massachusetts Avenue Cambridge, MA 02138 December 2011

We are grateful to Institute of Economics and Finance of The Chinese University of Hong Kong for funding, to P.W. Liu and T.J. Wong for their comments and suggestions, and to Jun Huang for excellent research assistance. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

NBER working papers are circulated for discussion and comment purposes. They have not been peer-reviewed or been subject to the review by the NBER Board of Directors that accompanies official NBER publications.

© 2011 by Joseph Fan, Randall Morck, and Bernard Yeung. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Capitalizing China Joseph Fan, Randall Morck, and Bernard Yeung NBER Working Paper No. 17687 December 2011 JEL No. G0,H11,J47,K0,N25,P2,Y2

ABSTRACT

Despite a vast accumulation of private capital, China is not embracing capitalism. Deceptively familiar capitalist features disguise the profoundly unfamiliar foundations of "market socialism with Chinese characteristics." The Chinese Communist Party (CCP), by controlling the career advancement of all senior personnel in all regulatory agencies, all state-owned enterprises (SOEs), and virtually all major financial institutions state-owned enterprises (SOEs), and senior Party positions in all but the smallest non-SOE enterprises, retains sole possession of Lenin's Commanding Heights. This manuscript introduces the chapters comprising the NBER volume Capitalizing China (Fan and Morck, eds. 2012), which examine China's high savings rate, banking system, financial markets, financial regulations, corporate governance, and public finances; and consider policy alternatives the CCP might consider if its goal is China's elevation into the ranks of high income countries.

Joseph Fan School of Accountancy Chinese University of Hong Kong Shatin, N.T. Hong Kong SAR pjfan@cuhk.edu.hk

Randall Morck
Faculty of Business
University of Alberta
Edmonton, AB T6G 2R6
CANADA
and NBER
randall.morck@ualberta.ca

Bernard Yeung National University of Singapore Mochtar Riady Building 15 Kent Ridge Drive BIZ 1, Level 6, #6-19 Singapore 119245 bizdean@nus.edu.sg

1. Introduction

Capitalizing China (Fan and Morck, eds. 2012) examines the accumulation, distribution, and governance of capital in China. According to Vladimir Lenin (Yergin & Stanislaw 1998), capitalists control "the commanding heights" of a capitalist economy and the Communist Party must control the "commanding heights" of a socialist economy. In the transition economies of Eastern Europe and the former Soviet Union, the Party ceded this ground to capitalists – though sometimes the same people continued in residence there.

China often seems to be embracing capitalism, but unwilling to admit this. Recent estimates correctly attribute 70% of GDP to its private sector (Nee and Opper 2011), and millions of entrepreneurs are starting new businesses (Khanna 2008). But many of those entrepreneurs rely critically on local or central Party connections, and terms like *hybrid sector* or *non-state-owned enterprise sector* might more aptly describe all but the smallest of these enterprises, whose CEOs and boards benefit from the advice of their dedicated enterprise-level Party Secretaries and Party Committees.

The studies in this volume reveal that China is not copying free market institutions, but trying something substantially different: Market Socialism with Chinese Characteristics is a genuinely unique system. A host of its formal reforms emulate the institutional forms of a market economy, often in painstaking detail. But its heart remains resolutely socialist: strategically placed SOEs, SOE-controlled pyramidal business groups, and ubiquitous Party cells, Party Secretaries, and Party Committees leave Lenin's "commanding heights" firmly and exclusively under the control of the Chinese Communist Party (CCP), and consign much of the rest to provincial and local Party cadres. This system also retains unique Chinese characteristics, relying on China's ancient tradition – at least in historical eras of relatively good government – of an insuperable, but meaningfully meritocratic and internally competitive, Imperial Civil Service to gather and process information, and to manage the economy. The result is a to-date successful stir-fry of markets, socialism, and traditional China that is fully none of the three, but mixes in bits and pieces of each – all tossed together over very high heat.

The chapters in this volume analyze this recipe in detail. Some of the ingredients the chapters highlight appeal to Western tastes. These include a commercial banking system replete with multiple regulators, inspectors, capital requirements, and disclosure rules, augmented by all the finery of a G7 financial regulatory system. Other ingredients less palatable to Western tastes include the CCP Organization Department (CCP OD) managing all senior promotions throughout all major banks, regulators, government ministries and agencies, SOEs, and even many officially-designated non-SOE enterprises. The Party promotes people through banks, regulatory agencies, enterprises, governments, and Party organs, handling much of the national economy in one huge human resources management chart. An ambitious young cadre might begin in a government ministry, join middle management in an SOE bank, accept a senior Party position in a listed enterprise, accept promotion into a top regulatory position, accept

¹ In this chapter, we follow the government of the People's Republic of China and the Chinese Communist Party in using the terms "market socialism with Chinese characteristics", or more briefly, "market socialism" or "socialist market economy" to describe the economic system used in China from the early 1980s on. We recognize that the appropriateness of both "market" and "socialism" as attributes of this system does not accord with some scholars' usage of these terms in economics, finance, and political economy. Nonetheless, these are the English words chosen by state and Party officials, and presumably reflect the intentions of the system's architects – Deng Xiaoping and his successors. Moreover, the words are defensible, in that the Chinese economy genuinely combines a powerful command and control apparatus with an admixture of market forces.

appointment as a mayor or provincial governor, become CEO of a different SOE bank, and perhaps ultimately rise into upper echelons of the central government or CCP (Macgregor 2010) – all by the grace of the CCP OD. The chapters in this volume describe state-of-the-art financial regulations, corporate governance codes, bankruptcy laws, taxation, and accounting and disclosure rules. But they also raise scores of concerns about market socialism's basic socialist and Chinese ingredients leaving market economy reforms as little more than a garnish.

So far, China's fusion economy is an unquestionable success. In 1978, The People's Republic of China posted a per capita GDP of US\$155, a sparse and dangerously dilapidated network of narrow roads; infrequent, unreliable and dangerous air connections between small, decaying airports; essentially no real healthcare system; mouldering universities, and a dispirited cynical populace. In 2009, People's China boasts a per capita GDP of US\$2,200 – over US\$3,700 at purchasing power parity (PPP), perhaps more given some estimates of black and grey market income (Wang & Woo 2011), a rapidly expanding network of divided highways, modern commercial airline service between sleek new airport terminals, an expanding modern healthcare system, and even the world's only magnetic levitation train - connecting Shanghai to its airport. Maddison and Wu (2008) estimate China's GDP surpassing Americas in 2015.

But this divides across some 1.3 billion people, so China's per capita GDP remains far below typical OECD levels, and unlikely to catch up for many years yet. For example, Japan's 2009 per capita GDP, at PPP comparably measured, was just under US\$40,000; and America's was approximately US\$46,000. Market socialism with Chinese characteristics has delivered on early-stage industrialization and modernization; and this may well suffice to make China the largest economy in the world. After all, with some four times the population of the United States, China can attain that status by exceeding one fourth of America's per capita. But this would still leave China numbered among low to middle-income countries. Propelling China's rise into the ranks of high-income economies will demand far more of its institutions.

The chapters in this volume collectively address how China's unique market socialist institutions are designed, how they facilitate the accumulation and allocation of capital, how they contribute to economic growth, and how they are beginning to have some interesting and potentially problematic side effects. Each of the subsequent chapters deals with these issues from a different angle. Pistor (2012, this volume) examines the governance of China's banking system. Allen et al. chronicle the development of the financial system. Allen and Shen (2012, this volume) focus on the workings of China's securities markets. Piotroski and Wong (2012, this volume) explore the financial transparency of China's business enterprises. Young et al. (2012, this volume) examine China's remarkable savings rate, and Bayoumi et al. (2012, this volume) examine savings by China's listed business enterprises. Gordon and Li (2012, this volume) examine the finances of China's multiple levels of government, and Chen (2012, this volume) recounts the history of China's rulers' attitudes towards public finance. China's public sector and the private sector are not clearly separable, but blend imperceptibly into each other.

The remained of this chapter connects the dots to show how, while each chapter addresses these questions from a different perspective, their findings are profoundly interconnected, and in ways foreigners, especially those well-schooled in modern economics, often have considerable difficulty grasping. Charting these connections requires placing the various chapters in the context of broader research on China, especially recent research into public and private sector governance. Once these interconnections become clear, the chapters coalesce into a comprehensive picture of the uniquely Chinese institutions that characterize its

market socialism, and present a fascinating picture of the inner workings of the world's soon-tobe largest economy.

2. Market Socialism's Achievements and Potential

Continued economic growth under Market Socialism with Chinese Characteristics is clearly important not only to China, but to the world. If the Chinese achieved the per capita GDP South Koreans currently enjoy, just over US\$17,000, its 1.33 billion people would produce a total GDP of almost US\$23 trillion – far more than the current \$14 trillion total GDP of the United States. Were the Chinese to match Japan's US\$40,000 per capita GDP, China's total GDP would amount to some US\$53 trillion – almost four times that of the United States.

China's per capita GDP now is roughly where South Korea's was thirty years ago, when China began its market socialism experiment in 1978; so using the South Korean per capita GDP to estimate China's in 2040 is not unreasonable as a first pass. Such simple arithmetic can be illustrative, but hardly definitive. That an industrialized and fully developed China's GDP will level off at precisely that of South Korea, Japan, or America is highly unlikely. America's GDPs will continue to grow; shifting age dependency ratios will come into play, educational attainments will change as new generations enter and old generations leave; and numerous other considerations will further complicate unfolding events. But that China will end up somewhere in that range if it succeeds in becoming a developed economy is true by definition. China would also perhaps endure multiple economic crises as it pulls abreast of today's leading economies, but so did South Korea.

As China develops, its effects on other countries' economies are becoming evident. Freeman (2006) estimates that the integration of China (and other formerly non-market economies) roughly doubles the global market economy's labour force, but increases its capital by much less, depressing wages across the board. Khanna (2008), more optimistically, stresses how the same union increases the scope and scale for entrepreneurship, and thus for global prosperity.

A fully developed China would dwarf the rest of the world as thoroughly as the United States did in the late 1940s. The entire US economy would match the combined economies of three or four large provinces of a high-income China, and today's other G7 countries would match the economies of individual provinces of various sizes. Dealings between a fully developed China and the United States might plausibly resemble those between the United States and Britain, France or Italy today. Designing international political and economic institutions, treaties, and precedents capable of constructively shaping such a future might merit serious contemplation by policy-makers in today's developed economies (Jacques 2009).

That contemplation would obviously begin by assessing the realism of such a scenario. Meiji Japan, South Korea, and other late industrializers all ultimately embraced capitalism and liberal democracy – albeit after initial inconsistency, incompetence, compromise, and backsliding. China has not done this; and its leaders demonstrate no intention of doing this. Thus far, they are breaking a new trail.

The chapters in this volume argue that China's embrace of free markets is at best tentative and at worst insubstantial. China is not embracing free markets as presented in Western economics textbooks. China is not emulating Anglo-American free markets, nor German nor even Meiji Japan or postwar South Korean market economies. Market Socialism with Chinese Characteristics is not Newspeak for "capitalism", but an economic experiment of unproven sustainability. This makes China's economic rise a qualified scenario: contingent upon either the

current system's continued adaptability or its ultimate abandonment for genuine market economy institutions. This also makes China intensely interesting to economists.

3. Markets, Socialism, and Chinese Characteristics

China remains a Democratic Dictatorship of the Proletariat: the CCP leadership, elected representatives of the Proletariat, rules the economy's "commanding heights" without opposition. The legitimacy of the CCP thus depends on its success in this. Since 1978, success has been gauged by sustained and broad-based economic prosperity.

The omnipresence of the CCP in China's business enterprises tends to surprise foreign observers. The CCP controls the careers of all government officials and senior SOE managers, and appoints cadres to key Party positions in many large non-SOEs. Provincial and local Party cadres similarly advise many smaller non-SOEs. Promotions depend on success in promoting economic growth and loyalty to the Party hierarchy. The Party's power to reward or punish aspiring bureaucrats and executives has grown stronger since the 1990s (Macgregor 2010).

Within these constraints, the system is a substantial meritocracy (Landry 2008). Cadres who oversee higher investment, rising per capita GDP, and other measurable signs of improved prosperity gain promotions to higher positions in the civil service, enterprise management, or the Party itself – if they also obey Party policies and directives (Macgregor 2010; Allen and Shen 2012, this volume; Pistor 2012, this volume). Promotions are outcomes of an explicitly competitive tournament based substantially on quantitative, if imperfect and pliable, performance metrics (Lü 2000; Li et al. 2008). Career advancement based on meritocracy, rather than solely on ideological purity, deviates starkly from China's Maoist era, but recalls the examination-based civil service meritocracies that governed more flourishing eras in its Imperial past (Spence 1999).

These promotions need not be vertical. SOE managers can be promoted into government or Party Positions, and cadres can be promoted into positions of influence in SOEs or non-SOEs (Allen and Shen, 2012, this volume; Li and Zhou 2005; Lü 2000; Landry 2008; Pistor (2012, this volume). For example, on April 3rd 2011, state media reported the promotion of Su Shulin from chairman of China Petroleum and Chemical Corp (SINOPEC) to Fujian provincial Party leader. On April 8, the CCP OD announced that Fu Chengyu, then chairman of China National Offshore Oil Corp (CNOOC) was replacing Su at Sinopec, and that Wang Yilin, the former top manager of China National Petroleum Corp (CNPC), the parent of PetroChina, was replacing Fu at CNOOC. When the music stopped, much to the consternation of foreign suppliers and customers, the CCP OD had rotated the top managers of China's major oil companies.

Such rotation plausibly broadens cadres' connections networks and, perhaps most importantly, fosters cadres' loyalty to the Party, rather than to specific localities, government agencies, enterprises, or shareholders. This is not utterly different from what happens in other countries. American investment bank CEOs become treasury secretaries and bank regulators, Canadian government auditors become corporate tax accountants; and the *président et directeur général* (PDG) of a French corporation is often a former civil servant from the ministry responsible for regulating that industry (Bertrand et al. 2010; Heilbrunn 2005; Kramarz & Thesmar 2006; Smith 2004). Career moves from government to business are sufficiently commonplace to justify the *Académie Française* sanctioned *pantouflage* (lit. shuffling wearing

indoor slippers) and the Japanese *amakudari* (lit. descent from heaven). But such a system can invite corruption and entrench weak governance (Huang 2008; Xu 2011).

3.1 Market Socialist CEOs

Pistor (2012, this volume) reveals Chinese financial sector pantouflage operating differently from French, Japanese, or America elite networks. China's centrally coordinated multiple bidirectional *pantouflage* is under overt Party control, and above criticism. America, France, and Japan are robust democracies, where abuses are exposed by an aggressively free press and constrained by open economies. The workings of the CCP OD better recall the Imperial Civil Service in pre-modern China, and its ready acceptance by the Chinese people perhaps accords with such a historical continuity. Western observers might understandably find this system bizarre; but many Chinese – even Western educated economists – seemingly regard it as such a self-evident part of the background as to hardly merit mention.

Cadres' success in overseeing economic growth depends on access to capital, and successive rounds of reform unfailingly preserved CCP control over the financial sector. All major banks are either SOEs or under tight control. In theory, at least, this lets SOE bankers direct capital to the SOE and non-SOE enterprises with the best prospects. But China is hardly unique in this: large SOE banks dominate other economies too (La Porta et al. 2002).

The CCP also provides ongoing and intensive training to promising cadres. The Party School and Civil Service School both teach modern management. Moreover, though China now boasts of numerous business schools, the Party School and Civil Service School are peerless for the connections and institutional knowledge their graduates obtain. But again, elite educational institutions and programs specifically designed for civil servants exist elsewhere. France's École Nationale d'Administration and other grandes écoles fast-track promising students into elite government and business positions; as do Japan's Imperial Universities and, legacy admissions aside, America's Ivy League colleges. China today evokes Veblen's (1921) concept of superstar engineers running a finely tuned precisely designed economic machine.

The scope for government failure problems in such a system is substantial, and is developed explicitly below. However, its potential for genuine economic development should not go unrecognized. The CCP's use of career incentives, capital allocation and training to promote economic growth allows the sort of economic engineering called for in Big Push industrialization (Rosenstein-Rodan 1943, Murphy et al. 1989). Each Party or government organ and every SOE or non-SOE top management team strives for economic success, but central Party coordination puts the focus on national economic success, rather than local or individual enterprise performance. Highlighting that this, not a covert adoption of capitalism, became the goal of Party pragmatists, Pistor explains tensions now distorting the Chinese economy and likely to loom larger as China develops. In particular, if growth is to persist, China's leaders must sustain a genuine meritocracy in a culture that esteems family ties; and must overcome Hayek's (1945) argument that information flows less freely through command and control structures as they grow larger and more complex.

3.2 Market Socialist Corporate Governance

Several chapters examine reforms to the regulation and governance of China's listed enterprises, and a synthesis of their findings again highlights that something unique is happening. Listed firms have CEOs and dual boards, organized along German lines, with requirements for outside

director participation in the full board and in key committees and many other features associates with tidy corporate governance. However, all this is likely at best a sideshow.

Parallel this corporate governance system, each enterprise also has a Communist Party Committee, headed by a Communist Party Secretary. These advise the CEO on critical decisions, and are kept informed by Party cells throughout the enterprise that also monitor the implementation of party policies. Indeed, the Party Secretary plays a leading role in major decisions, and can overrule or bypass the CEO and board if necessary (Deng et al. 2011).

For example, foreign independent directors on the board of China National Offshore Oil Corporation (CNOOC) reportedly first learned of that enterprise's takeover bid for Unocal, an American oil company, this from news broadcasts (Macgregor 2010). Directors often also learn of such major strategic moves, and of equally major personnel moves, such as the rotation of oil company top managers described above, after the fact. Despite their formal powers, CEOs and boards are thought to welcome Party advice, and any directors likely to have reservations are kept out of the loop to preserve harmony – especially if issues the CCP views as strategically important are involved. Party intervention in less strategic sectors, and in smaller enterprises, may well be less direct and overt, and the priorities of provincial and local Party cadres can deviate from those of top CCP cadres in Beijing.

Listed enterprises' Party Secretaries and Committees are difficult to ignore. When the Shenzhen and Shanghai stock exchanges began trading in the 1990s, large SOEs were instructed to populate them with listed joint stock companies. The SOEs consequently organized subsidiaries whose financial ratios met the exchanges' listing requirements, and floated minority interests in these via equity carve-out initial public offerings (IPOs). Both stock markets still feature many listed enterprises with vast total market capitalizations and miniscule public floats.

Control blocks in these were retained by various government ministries or other state or Party organs, or by other listed SOEs in pyramidal holding company structures, and these blocks were designated as inalienable *non-traded* shares. Reforms in the 2000s unified each listed enterprise's traded and non-traded shares into a single alienable class, effectively turning full market capitalizations into potential public floats. Because this greatly increased the total quantity of equity available to savers, because non-traded shares owned directly by the central government were not required to pay dividends to the government until 2008, and (perhaps most importantly) because blocks of non-traded shares were reserved for employees and managers, valuations fell (Bayoumi et al., 2012, this volume) and existing traded-shareholders were compensated.

Equity unification, by letting the governments and government agencies that previously held non-traded shares sell out, could transform the large SOE and SOE subsidiaries that still dominate both stock markets into fully privately-owned firms – albeit still assisted by their Party Secretaries and Party Committees.

To date, Allen and Shen (2012, this volume) find little evidence of a widespread substantial increase in private share ownership, and conclude that government and Party officials retain control blocks in most listed enterprises, either directly or through pyramiding, especially in strategically important sectors such as banking. To illustrate, they examine ICBC, China's second largest bank, and find that a scant 4.3% of its domestically traded shares are in private hands (ICBC has a class of "H shares" traded in Hong Kong that appear largely foreign-owned.

H shareholders cannot outvote domestic shareholders. Consequently, the CCP continues to control most of the voting power in most listed firms' shareholder meetings.

Nonetheless, genuinely private ownership is rising. Allen and Shen (2012, this volume) find officially designated *listed SOEs* constituting over two-thirds of listings and including most very large enterprises. The remaining less than one third of listings, officially designated *listed non-SOEs*, consists of listed SOEs' controlled subsidiaries and privately owned corporations. The CEOs and boards of listed SOEs are appointed by their parents' CEOs, advised by their parents Party Secretaries. The CEOs and boards of all major listed non-SOEs and SOEs are advised directly by their own Party Secretaries and Party Committees (Yu, 2009).

Much of China's private sector consists of unlisted enterprises: local state-controlled cooperatives (township and village enterprises, or TVEs), many of which lease control rights to managers in transactions referred to as management buy-outs (MBOs). The sector also includes many joint ventures with multinationals, and numerous small single proprietorships, often of uncertain legal status. Preferring the term hybrid sector, Allen et al. (2012, this volume) and Gordon and Li (2012, this volume) examine local government-controlled enterprises, and suggest that their governance may be unexpectedly strong. Of course, all but the very smallest facilitate the organization of Party cells, and their CEOs value the advice of their Party Secretaries, whose connections and influence with regulators, officials, and SOE banks and business partners can be critical.

The pause Allen and Shen (2012, this volume) observe in the transition of listed SOEs into fully privately owned firms could allow time for other reforms – either to facilitate their efficient regulation and corporate governance or to safeguard Party influence over their governance, or both. Allen and Shen (2012, this volume), and Allen et al. (2012, this volume), and Pistor (2012, this volume) describe the development of China's financial regulations. All question the real traction of these reforms in doing what financial regulations do in capitalist economies, given corporations' parallel governance systems.

For example, China's fully modern Corporate Governance Code authorizes shareholder derivative lawsuits and assigns fiduciary duties to directors and officers, though not Party Secretaries or Party Committee members. Judges are Party appointees, and their careers turn on their respect for Party policies and acceptance of Party guidance. Moreover, court rulings are enforced at the discretion of Party officials. For example, Allen et al. (2012, this volume) find bankruptcy rulings are rarely enforced because central government circulars applicable to SOE bankruptcies supersede the law, because local governments can halt cases, and because SOE banks prefer to avoid write-downs triggered by formal bankruptcies. Xu (2012, this volume), in reviewing this chapter, suggests that, despite CCP OD control over executives' careers, banks financial operations are decentralized and sub-national government and Party influence may be more salient to local branch decisions regarding debt forgiveness. Allen et al. conclude that "for insolvent SOEs, what triggers the bankruptcy procedure is not their financial status per se, but whether they can get preferential treatment from the government." Finally, court rulings need not protect creditors. Although the Supreme People's Court ordered lower courts not to process bankruptcies designed solely to nullify debts in 2002, Garnaut et al. (2006) report that 90% of SOE CEOs surveyed believe bankruptcy to be "a feasible channel to evade bank debts."

Piotroski and Wong (2012, this volume) suggest that weak regulation and discretionary enforcement render Chinese corporate financial reporting unreliable, leaving listed enterprises opaque to outside investors. This prevents outside shareholders and creditors from questioning managerial decisions; but also prevents capital market forces from channelling people's savings

to their highest value uses. Jin (2012, this volume) argues that public investors may not demand transparency because central government policies, not enterprise policies, are the main drivers of stock prices.

All this surely diminishes marginal shareholders' valuations. Rational investors would discount the future dividend streams to account for governance and regulation deficiencies, and buy if share prices subside enough. The continued existence of Chinese stock markets is thus not threatened by such deficiencies, and investors can presumably expect fair risk-adjusted returns. But the governments and SOEs that sell their control blocks to investors will receive less per share, all else equal.

More importantly, the social purpose of a stock market is not to persist, nor even to fill the coffers of privatizing governments, but to direct savings to their highest value uses (Tobin 1984; Wurgler 2000). Intrusive Party involvement in corporate governance would dam off market forces and entrust this task to cadres. The CCP is far more professional than in the past, and ideologues are largely replaced by pragmatists; so Party guidance may well substitute for market forces – effectively turning China's listed enterprises into industrial policy tools. In other countries, state-led industrial policies often manage spurts of high early-stage growth, but then fail because capital allocation becomes more difficult in later stage growth, when creativity and productivity enhancement matter more than capacity expansion, and because political rent-seeking consumes ever-increasing resources (Easterly 2006). Perhaps this time is different.

3.3 Market Socialist Bankers

The Panic of 2008 and subsequent recession leave Ango-American stock market-based capitalism in some disrepute. In theory information-laden share prices guide capital towards firms with sound investment opportunities and away from firms that look ill-run; and well informed bank loan officers lend to firms with sound business plans and deny loans to dodgy firms (Tobin 1984). In practice, financial bubbles and crises misallocate capital, but most developed capitalist economies' financial systems appear to perform these tasks tolerably efficiently most of the time (Rajan and Zingales 1998; Wurgler 2000). Nonetheless, legitimate concerns attach to relying on stock markets to allocate capital in developing economies (Morck, Yeung and Yu 2000; Jin and Myers 2006). If China largely disconnects its stock markets from capital allocation decisions, its banks might nonetheless channel market forces.

Allen et al. (2012, this volume) show most bank lending flowing to SOEs, rather than the hybrid sector they find better equipped to generate wealth – despite SOEs' ongoing accumulation of nonperforming loans. Their findings suggest that politics and connections dominate financial viability in bank loan allocation decisions, sheltering banks from market forces as well. Unsurprisingly, simultaneous capital shortages and surpluses ensue – affecting different. The capital shortage in the hybrid sector is due to the lending bias of state-controlled banks, which prefer to lend to large state-controlled enterprises; and frequent government intervention in the financial system merely reinforces this bias. In consequence, an informal financial sector – arguably, a shadow banking sector with Chinese characteristics – has arisen to provide credit to the many hybrid enterprises the banks neglect. In a prior paper, Allen et al. (2008) argue that the informal sector can substitute for the formal banking sector; and the chapters in this volume do not contradict this. However, the informal financial sector's sources of capital are opaque, rendering meaningful assessment of the sector's size, stability, and efficiency highly problematic.

Moreover, the high interest the sector charges hybrid enterprises, most of which are small and median sized operations, and the sometimes severe consequences they suffer for missing a payment, suggest that the informal financial sector provides very costly capital. This may well be commensurate with high lending risks, but again, a quantitative assessment is stymied by the sector's opacity. China's shadow banking system, like Americas in previous years, may well conceal hidden sources of instability and inefficiency.

Pistor (2012, this volume) utilizes the tools of network analysis to document webs of personal ties between Party cadres in charge of China's banks and financial regulators. This dense network of linkages centered on cadres in key CCP organs, contrasts vividly with banks' formal chains of accountability designed along Western lines. While individual banks, business enterprises, and regulatory agencies appear distinct on paper, they are actually highly integrated because the CCP OD handles HRM decisions throughout all of them (Macgregor 2010). The future careers of top bankers and bank regulators thus depend on how cadres in the CCP OD assess their performance. If the quality of lending decisions predominates in these assessments, an increasingly professionalized and pragmatic Party might tolerably well incentivize bankers to lend efficiently. But if ideological purity, faction loyalty, or outright corruption take precedence, massive capital misallocation is likely.

Pistor (2012, this volume) finds that the prominence of the CCP OD is not a Maoist holdover awaiting reform, but a solution CCP cadres designed and built to safeguard the Party's control over Lenin's Commanding Heights as reforms progressed. Thus, China complies fully with WTO requirements to liberalize and deregulate, even as the CCP OD integrates top personnel at banks, borrower enterprises, regulatory bodies, governments, and the Party itself; with loyalty and job performance, in uncertain balance, the criteria for promotion throughout.

These considerations lead Pistor to interpret Chinese *pantouflage* as qualitatively different from its French, Japanese, or American cognates; though she does not preclude the possibility that future reforms might lead to convergence. As countries grow richer, tolerably efficient capital allocation becomes both more urgent and more difficult. If China persists with its current system, regulatory capture problems (Stigler 1971) seem likely to defeat even the best de jure financial regulations. Allen and Shen (2012, this volume), Allen et al. (2012, this volume) and Pistor (2012, this volume) argue that reforms effectively separating banks from their regulators would substantially improve the quality of capital allocation over the longer term. However, Song (2012, this volume) argues that the system Pistor (2012, this volume) describes could minimize systemic shocks while delivering politically acceptable growth for some time yet (see also Deng et al. 2011).

3.4 Market Socialist Tycoons and Entrepreneurs

Forbes Magazine lists more US dollar millionaires in China in 2011 than anywhere else save the United States itself. Wang and Woo (2011) argue that China's official data vastly underestimate rising Chinese inequality over the past two decades. Forsaking Maoist orthodoxy, China heeded Deng Xiaoping's call to "let a few people get rich first" as a prelude to broader development.

Faster economic development may well cause greater inequality, for a time at least, because the talents needed to organize an economy's resources efficiently are scarce and command high prices in the free market (Kuznets 1955). Persons possessing exceptional judgement (Knight 1921), foresight (Hayek 1941), creativity (Schumpeter 1911), technological skills (Veblen 1921), organizational ability (Coase 1937), or other rare and valuable skills

accumulate wealth first, aggravating inequality, before their businesses create a large affluent middle class that mitigates inequality.

However, inequality per se need not cause development. If a nation enriches an elite largely bereft of these unique talents, inequality can lock in stagnation (Morck, Wolfenzon and Yeung 2005). This is because an inadequately talented elite rationally fears development, for this would require its displacement by a talented elite, and uses its political power to preserve the status quo (Olson 2000). Such low-level poverty traps well characterize much Latin American history (Haber 2000; Edwards 2009).

The talents of China's nouveaux riches – its Communist millionaire class – are thus important. If Market Socialism with Chinese Characteristics reliably entrusts capital to appropriately talented people, development can progress and inequality can abate. But if spoiled princelings, gray apparatchiks, ideological zealots, or scheming sycophants rise to the top more reliably, China risks emulating the Ottoman Empire, 20th century Latin America, or Tsarist Russia, and combining brutal inequity with chronic economic lassitude.

The various chapters document how China's business elites owe their positions to Party favour, or at least forbearance. But even very small-scale private businesses are subject to Party guidance. Any enterprise employing more than three Party members must allow a Communist Party Cell to organize and select a Secretary. This allows the CCP in Beijing to keep up-to-date on any rising firm's business operations and plans, provide important advice at critical junctures, and assist its CEO in complying with regulatory constraints or negotiating exemptions with government officials or Party cadres.

All this raises fundamental questions about China's business elite: are they primarily entrepreneurs or apparatchiks? Allen et al. (2012, this volume) argue that many are entrepreneurs. Defining the *hybrid sector* as all non-SOE unlisted firms, including privately owned businesses and enterprises partially owned by local governments – including Township and Village Enterprises (TVEs) – they see competition between local governments mitigating inefficiency. This, they argue, makes TVEs and other local government-controlled enterprises resemble purely private businesses more closely than large SOEs and SOE subsidiaries.

Even if not entirely free of state influence, the hybrid sector likely has the greatest potential for fostering economic, rather than political entrepreneurship (Baumol 1990; Murphy et al 1991). Its success is thus an important public policy issues. The corporate tycoons who run the SOEs, listed SOEs' subsidiaries, and ex-SOEs that constitute China's big business sector are largely career cadres. The Party strives to select the best and brightest, and provides ongoing high-quality training; but bureaucratic hierarchies are generally ill-suited to rewarding creativity. Economic entrepreneurship thus appears dependent on the financial system identifying and backing promising entrants and upstarts in the hybrid sector.

Consistent with corporate savings primarily arising in small non-SOE businesses, the hybrid sector finances most of its capital investment out of enterprise savings – 60% for the sector overall and 90% for purely private businesses – with informal debt, such as trade credit, making up much of the remainders. The hybrid sector's high dependence on retained earnings for expansion indicates that China's major banks have yet to make major inroads in financing economic entrepreneurs. Allen et al. (2012, this volume), documenting the entrance of new non-SOE banks and intermediaries, discern a diminution of the big SOE banks' supremacy. That entrant banks might better channel capital to economic entrepreneurs remains to be seen.

In explaining this reticence in lending to hybrid-sector businesses, Allen et al. (2012, this volume) highlight the non-performing loan (NPL) of the major SOE banks. Arguing that these

NPLs are largely a "policy burden" – the banks extended loans under political pressure – and that the burden is greater than a cursory inspection of the banks' balance sheets indicates; they argue that if the CCP desires continued high growth, a more complete immunization the big SOE banks' NPL problem might be warranted. They argue that purchases of banks equity by the Central Huijin Investment Company, a sovereign wealth fund initially capitalized by the People's bank of China, helped solidify the banks' capital bases, but did not entirely solve their NPL problems. Moreover, the share purchases left the large SOE banks even more firmly under Party control and SOE bankers still jittery about risky lending.

These findings suggest that Market Socialism with Chinese Characteristics does not allocate national savings to the most efficient users of capital. Because hybrid sector enterprises rely on trade credit, rather than financial institutions and markets, for capital, they are subject to their suppliers' and customers' terms and conditions. Trade credit in Western economies tends to an expensive source of capital.

In summary, China's tycoons, its barons of big business, are predominantly career bureaucrats and ex-bureaucrats: cadres the CCP Organization Department promoted through top positions in large SOEs and SOE subsidiaries. China's banking system appears well suited to channelling capital to these cadre-tycoons. China's entrepreneurs, who appear most often in the hybrid sector, rely largely on savings, somewhat on trade credit, and seemingly very little on the financial system.

3.5 Market Socialist Capital

Market Socialism with Chinese Characteristics is nonetheless capitalizing China rapidly – in the sense of eliciting an extraordinarily high and rising savings rate. As Prasad (2009) notes, investment pushes growth in China to an unprecedented extent, and consumption constitutes the lowest fraction of GDP ever recorded in any major economy.

This presents a dual puzzle to Yang et al. (2012, this volume). Since the 1978 advent of Market Socialism, China's savings rate never dipped below 34% - far above the savings rates typical of other countries: developed or developing. Why is China's savings rate so high?" From 2000 on, China's savings rate climbed steadily so that Chinese now save roughly one yuan out of every two. This is 3.3 times the average savings rate for other low income countries and 2.4 times the global average. Why, they ask, is China's unprecedentedly high savings rate yet rising?"

Young's (2012, this volume) discussion argues that Chinese consumers and enterprises have much higher incomes than the data show because of inadequate exchange rate adjustments to purchasing power parity, and consequently only appear to save much more than foreigners. This corroborates Wang and Woo's (2011) contention that official Chinese aggregate consumption figures are vastly understated because they omit gray market transactions. Citing low-cost loans from SOE banks and ubiquitous debt forgiveness and the fact that SOE dividends are not actually paid in many cases, Young argues that many enterprises actual costs are far below the nominal costs reported in their annual reports. Adding that local governments are awash in incomes from land lease sales, and ought not to spend all these proceeds at once, he is also unsurprised by high government savings rates.

China's national income accounts display other irregularities. For example, provincial GDPs in past years typically summed to more than national GDP. Lequiller and Blades (2006, c. 13) ties such anomalies to the Material Products System (MPS), an input-output framework for monitoring production quota attainment under central planning still used to track enterprise and

regional economy performance. Tying data collection to performance evaluation plausibly encourages inflated production reports: for example, exaggerated agricultural production reports are blamed for excessive exports and rural starvation during the Great Leap Forward (Lü 2000; Yang 2008). The central government's statistics, which adjust MPS data using surveys, may be more reliable than the provincial numbers, which typically do not; however broader surveys by the central government finding its official figures on GDP to be too low triggered major upwards adjustments in 2005 (Lequiller and Blades, 2006, p. 377) - though Wu (2006) posits politics, not statistical accuracy, driving these adjustments. While China's national income accounting is flawed, the data are not meaningless. Other countries at similar stages of development quite plausibly have similar or worse data, yet do not display comparable anomalies. Maddison and Wu (2008) painstakingly dissect Chinese national income accounts and report distortions, but not futility.

Accepting China's national income accounts at face value, Yang et al. (2012, this volume) scrutinize its rapid and accelerating pace of capitalization, and weigh alternative explanations of it. They consider, but ultimately dismiss, a cultural explanation: Savings rates tend to be high across East Asia, where traditional values extol savings. But traditional Asian values are not obviously stronger in China than elsewhere in the region, and are not obviously becoming even stronger in China faster than elsewhere. Moving on to economics-based explanations, they divide savings into that by enterprises, governments, and households. This reveals more patterns.

First, this exposes a long-run trend. In the early years of market socialism, government and enterprise savings were large and household savings were small. But as China developed, household savings rose steadily, while the other categories waned. But after 2000, all three surged, with government savings soaring fastest.

Government savings rose because tax revenues rose faster than government spending. Yang et al. (2012, this volume) link this to an ongoing "rich country – poor people" controversy, arguing that pressure for more spending on public goods and services is likely to reverse this trend. However, Chen (2012, this volume) disagrees, arguing that Party leaders view government wealth accumulation as a pure policy objective. Yang et al. (2012, this volume) also suggest that demography may warrant a high government savings rate: the one-child policy means a low child dependency ratio now, but a very high seniors dependency ratio in the future.

Enterprise savings are an ambiguity because many enterprises remain state controlled. The distinction between government and enterprise savings, though clear for accounting purposes, is somewhat blurry for economic conclusions. Nominal enterprise earnings rose sharply from the 1990s on, probably reflecting a confluence of favourable developments. New technology and better management improved productivity. Weak domestic competitive pressure and WTO access to foreign markets sustained revenues. Subsidized loans from SOE banks and largely *de jure* illegal migration of labor from the countryside contained capital and labour costs, as did a generally unresponsive Party stance against labour unrest. These conditions let enterprises accumulate savings; however, the chapter argues that price competition will likely erode enterprise savings as reforms progress.

In terms of market share concentration, competition appears robust in China (Nee and Opper 2011). But the financial system's indisposition to allocate capital to hybrid sector enterprises (Allen and Shen, 2012, this volume; Allen et al., 2012, this volume) may well be a high barrier to entry for unconnected would-be entrepreneurs. The true strength of competition in

China is thus ambiguous, and competition could be a public policy problem despite relatively low concentration.

Yang et al. (2012, this volume) explain how household savings rose markedly – from 6 to 7% in 1978 to 22% in 2007 – with a rising propensity to save with income, as in Chamon et al. (2010). Yang et al. (2012, this volume) find China's age-savings profile, previously "hump shaped" as in a life-cycle savings theory (Modigliani and Brumberg 1954), inverting after 2000. That is, just as China's savings rate shoots skyward, the curve flips: households headed by very young and very old people now save more than households headed by middle-aged people. Reviewing the literature on dependency ratios and savings, they argue support Chamon and Prasad (2008) who, reporting a similar pattern, present a "buffer-stock" model of savings: younger households save to buy homes; older households save for medical expenses and old age security.

Expanding this, Yang et al. (2012, this volume) advance another more subtle demographic explanation: competitive savings. China's one child policy greatly skewed its gender ratios, and marriageable women are now in short supply. Families might therefore save to help their sons attract wives, an idea initially raised by Wei and Zhang (2011). Confirming this suggestion, they find markedly higher savings rates in provinces with fewer females. While alternative explanations are possible – for example, these might also be provinces where traditional values are strongest – the possibility of unfolding unintended economic consequences to the venerable Chinese preference for sons is intriguing, and deserves further investigation

Noting that prior unemployment does not greatly increase savings, they dismiss an augmented precautionary savings motive due to middle-aged SOE employees' job insecurity However, they are unable to preclude broader effects associated with the private provision of education, health care, and housing. Student loans, mortgages, and private health insurance remain largely inaccessible privately, and the government has yet to provide universal health care. Allen et al. (2012, this volume) document a stunted insurance industry, so households have little alternative but to manage health and other risks with aggressive precautionary savings. All this is consistent with Chamon and Prasad (2008): young households may be saving to buy homes, cars, and appliances because mortgages and consumer loans are not generally available; old households may be frantically saving in anticipation of looming heath care costs because insurance is not generally available. The rising savings rate in recent years also fits the narrative in Chamon and Prasad (2008) and Yang et al. (2012, this volume): housing prices rose sharply in the same period as pension replacement rates fell The chapter predicts that future reforms to remedy these gaps are apt to reduce China's savings rate.

3.6 Market Socialist Profits

Yet another reason for high savings could be that individuals do not consider the savings of business enterprises to be relevant to their personal well-being. In a country with widely held corporations, an efficient stock market, and strong shareholder rights, savings by business enterprises can be expected to translate into future dividends to individuals. However, most large Chinese listed enterprises have tiny, often single digit public floats. Most of their shares belong to government or Party organs, directly or through intermediary SOE holding companies. Moreover, most Chinese individuals do not own shares. A sort of Ricardian equivalence might nonetheless prevail: individual Chinese might expect high future dividends payable to state organs to lower individual tax rates in the future. However, cynicism about the efficiency of this

indirect savings method might well disconnect enterprise savings from individuals' consumption-savings decisions.

China's national income accounts suggest high enterprise savings, and Bayoumi et al. (2012, this volume) re-examine China's savings puzzle using financial data disclosed by enterprises trading on the Shanghai and Shenzhen stock markets. Their startling, and very robust, conclusion is that listed Chinese enterprises do not retain substantially more earnings than comparable listed firms elsewhere. Moreover, the data show substantial declines in listed enterprises' savings after 2000. This result, combined with the findings in Yang et al. (2012, this volume) imply either that unlisted enterprises savings drive both the high overall enterprise savings rate and the post-2000 surge in enterprise savings Yang et al. (2012, this volume) discern in macroeconomic data, or that something is seriously amiss with Chinese data. Accepting the validity of both firm-level and macroeconomic data, despite the reservations of Piotroski and Wong (2012, this volume) regarding the former and the problems in China's national income accounts data raised above, several reconciliations are possible.

Most obviously, as, Zu's discussion (2012, this volume) contends, listed enterprises may be qualitatively different in numerous dimensions from unlisted enterprises, making different savings rates unremarkable. One set of differences likely to matter is access to capital. Listed enterprises, able to issue shares, can raise funds readily to finance new growth opportunities as they arise; while unlisted enterprises, unable to tap equity markets, must pile up retained earnings as corporate savings accounts to be drawn down in the future as needed. Or, the top executives of listed enterprises may have stronger personal connections to SOE bankers, or to Party and government officials capable of influencing SOE bank lending decisions. Thus, unlisted firms might need savings because they lack access to credit, while listed firms' well connected insiders might make enterprise savings unnecessary. The strength of such insiders' connections varies across enterprises, and can be measured (Fan, Wong and Zhang 2007). Bayoumi et al. (2012, this volume) confirm that listed enterprises with stronger Party connections have lower savings rates; though they link this to lower net earnings, not higher retained earnings.

Either reconciliation incriminates financial system infirmities for China's high macroeconomic enterprise savings rate, specifically fingering relatively financially isolated and politically unconnected unlisted enterprises. If so, reforms that would let capital market forces allocate savings impartially to their highest value uses are a likely policy option to make high growth sustainable. Allen and Shen (2012, this volume), Allen et al. (2012, this volume) and Piotroski and Wong (2012, this volume) elaborate on such reforms.

Still another possible reconciliation is that unlisted enterprises, shielded from public view and foreign criticism, have more flexibility allocating their retained earnings. If so, listed firms might tunnel (Johnson et al. 2000) income to their unlisted parents, or to other entities from which insiders can readily move capital to where they feel it is needed. Tunnelled funds could appear as costs in the subsidiaries' financial statements and retained earnings in those of their parent SOEs. Amid rapid economic development, this freedom of action can be justified as a means of overcoming network externalities, first mover hold-up problems, and other coordination problems that arise in early stages of industrialization (Rosenstein-Rodan 1943; Morck and Nakamura 2007; Morck 2011) and recent empirical work supports this thesis (Fan et al. 2010). However, the same freedom of action also creates scope for corruption on a grand scale, and raises the possibility that high earnings retentions by unlisted enterprises might be bookkeeping entries concealing unaccountably enriched insiders.

3.7 Market Socialist Debts

Allen et al. (2012, this volume) document a very rapid growth in government bond issues, with outstanding bonds totalling some RMB 10 trillion (US\$1.44 trillion) by December 2008. Virtually all is government debt: about 50% is government bonds, about 37% are the bonds of SOE policy banks, and the remaining 13% are the debts of large Chinese enterprises, virtually all of which are either SOEs or subsidiaries of SOEs. The absence of fully private-sector bonds is quite plausibly due to China's politicized bankruptcy process (Allen et al., 2012, this volume).

Chen (2012, this volume) examines China's government debt, but from the viewpoint of creditors. In December 2004, China's national debt stood at RMB 2.96 trillion – just under 22% of GDP. Of this, 97% was owned to domestic lenders, and only 3% was owed to foreigners. The total was 21.6% of GDP, well below the internationally-recognized warning limit of 60%. In 2003, interest payments on the national debt cost RMB 300 billion, about 14% of fiscal revenue. These figures, Chen argues, probably greatly understate the real debt payments because they do not adjust for SOE banks' NPLs. Citing estimates ranging from 29% to 36% of GDP for these, Chen re-estimates China's total national debt as somewhere between 50% and 58% of GDP. This, he notes, approaches the 60% threshold, above which creditors begin sounding alarms.

The high government savings documented by Yang et al. (2012, this volume) need reconciliation with a large government debt. Yang et al. net Chinese government inflows and outflows and assess government savings in 2003 at RMB 944.5 billion, roughly one tenth of bonds outstanding. Consistent with government savings and debts partially offsetting each other, Chen reports a RMB 200 billion rise in government bond issues (from RMB 400 billion in 2000), even as Yang et al. report government savings rising by about RMB 620 billion (from 325.5 billion in 2000). Clearly, accumulated government savings cannot be explained by bond issue proceeds, but the simultaneous accumulation of debts and savings remains incompletely explained.

Chinese officials' motives for borrowing and saving simultaneously, and both on very large scales, are harder to square. One possibility is that the central government might be borrowing and local or regional governments might be saving. Alternatively, the two might reflect an underlying unity. For example, the central government might be borrowing during a period of low international interest rates to accumulate capital for future needs; or borrowing in one currency and saving in another to control the exchange rate. This puzzle requires more work.

Contemplating China's large government debt, Chen sees a stark deviation from traditional characteristically Chinese policies. Throughout the Ming and Qing dynasties, China's rulers equated good government with the accumulation vast silver hoards, to be drawn down should natural disaster or war arise. In these mercantilist aims, China resembled most premodern governments, Asian and European (Macdonald 2003). Emperors typically increased taxes and debased or inflated the currency to supplement drained silver hoards. As in medieval Europe, forced lending to princes who dwelt above the law ultimately elevated credit risk sufficiently to destroy the market. Confirming this, financially strapped 19th century Qing rulers defaulted on the forced loans they extracted from a nascent banking industry (Fan and Morck 2010).

Chen (2012, this volume) accepts Macdonald's (2003) argument that limited governments can borrow more readily because they can less readily nullify their debts, and that this induces a positive feedback loop wherein governments, concerned about tapping bond markets, act more responsibly, which elevates their reputations, which government officials come to value, and so on. This virtuous circle, Macdonald argues, let Western governments

borrow to finance infrastructure, war, and other expenditures; while China traditionally had to save up for such things.

Of course, bond market discipline is not the only possible check on irresponsible government spending. Profligate local and provincial governments that run up unmanageable debts may invite scrutiny by the CCP OD, and the career opportunities of those deemed responsible might be curtailed – especially if the meritocratic aspects of Market Socialism with Chinese Characteristics persist and deepen. Alternatively, an unwillingness to acknowledge errors might keep China from achieving this virtuous confluence. China's public debt is mostly owed to domestic creditors, who still have few other savings options – basically bank accounts, domestic (mostly SOE or SOE related) stocks, and a few SOE-run mutual funds. While irresponsible government policies might increase China's borrowing costs, its creditors' power to discipline the government and the Party is limited. Even if a bond market develops, Chinese bondholders are unlikely to become prominent on the economy's Commanding Heights. CCP discipline seems more feasible, if less certain, at least in the foreseeable future.

3.8 Market Socialist Public Finance

Gordon and Li (2012, this volume) examine public finance under Market Socialism with Chinese Characteristics more generally. Noting that China's economy has grown extraordinarily rapidly despite multiple checks on market forces, they posit a role for something akin to Tiebout (1956) competition, wherein competition for taxpayers forces governments to provide public goods and services efficiently.

Tiebout competition achieves this if taxpayers can either vote out incumbent politicians or exit, carrying their tax checks to other jurisdictions that provide more or better public goods per yuan of taxes. At present, contested elections are restricted to village councils, so incumbents' fear of voter wrath is an unlikely force for public sector efficiency.

Exit is also a limited option because individual taxpayers cannot freely relocate. Recapitulating traditional feudal labor mobility restrictions, the People's Republic of China's hukou system, established in 1949 and reorganized into its current form in 1958, assigns each individual to a locality, designates her residence as either urban or rural, and is hereditary. Changing one's hukou requires the permission of officials in both the old and new jurisdiction, and is currently difficult – especially for relatively unskilled people – because of concerns about a brain drain from poor regions and shanty towns developing in high growth provinces. A skill-based point system is coming into use among migrant-receiving provinces. Illegal migrants are becoming commonplace, but cannot send their children to state schools or utilize other government services, raising the spectre of an entrenched urban underclass. At present, the migration of individuals is unlikely to contribute to strong Tiebout competition.

However, Gordon and Li (2012, this volume) argue that, even though individual mobility may be hampered, many business enterprises' activities are mobile across regions, and respond to competitive incentives offered both by *and to* village, township, municipal, province-level city, provincial, and regional (hereinafter "local" for brevity) government officials. Most obviously, local officials whose administrations provide better public goods for lower tax and regulatory costs attract firms to tax. If local officials cause their jurisdictions to compete for business activity, and cause the enterprises they govern to maximize their profits, something akin to social welfare maximization might theoretically ensue.

Moreover, local officials, often doubling as top executives of the hybrid enterprises their jurisdictions established, also have direct incentives to ensure those enterprises maximize profits

– including by moving operations to jurisdictions that offer prospects of higher profits. This is because, between 1978 and 1994, local governments received both profits and tax revenue from all the enterprises they established, and their local government officials had free hand to spend much of that revenue as they liked. After a major tax reform in 1994, local governments still remained the de facto residual claimants to those enterprises' after-tax earnings net of mandated spending, and local government officials remained largely free to spend these funds as they chose. Local government officials thus gain larger discretionary budgets by ensuring that the hybrid enterprises they control generate higher profits by allocating resources more efficiently (Gordon and Li 1995; Li 1997).

If local officials' discretionary cash flow maximization induces local governments to compete for business activity and induces hybrid enterprises to maximize their residual cash flows, something approaching efficient resource allocation might ensure. However, some caveats are clearly in order. Local government officials, striving to maximize the residual earnings of enterprises that provide them with discretionary cash flow, might distort local policies to favor those enterprises to the disadvantage of the general citizenry. For example, such officials might skew local taxes, fees, or regulations, or might press local managers of state owned banks, to favor enterprises whose residual budgets they control. The social welfare benefits of such policies are far from clear. Second, fattened local government coffers need not translate into more or better public goods – a problem epitomized as China's a "rich nation – poor people" dichotomy. Indeed, in something akin to the "free cash flow" agency problems Jensen (1986) documents in cash-rich US firms with unaccountable CEOs, fiscal revenues excess to basic spending commitments were dispensed by essentially unaccountable local officials. Cash-rich sub-national governments, it is now widely recognized, actually provided very poor public goods and services. In response, to the "rich nation – poor people" problem, further mid-1990s reforms shifted influence over bank lending from local to central government and Party officials who, it was hoped, would more reliably allocate public funds to provide badly needed public goods. Gordon and Li (2012, this volume) point out that many local governments switched to raising revenues from land lease sales, but remark that this is an exhaustible source of revenues.

Finally, Li (2012, this volume), in discussing this chapter, argues that local officials care more about promotions, which affect their long-term earnings, than about their current discretionary budgets, and are therefore guided primarily by Party dictates from Beijing.

Nonetheless, China has grown far more impressively than its widely panned institutions would seem to warrant. The premise of Gordon and Li (2012, this volume), that Market Socialism with Chinese Characteristics has unappreciated efficiency, is thus clearly worth pursuing. To explore this premise, they develop a simple, yet elegant, model of local public finance under these reforms, assuming local bureaucrats maximize tax revenue net of spending on public goods. This is defensible, in that top local bureaucrats have substantial discretion over how their governments' revenues are spent once mandated public goods are provided. The model treats local governments as profit maximizing entities that can attract business activity by providing public goods more efficiently.

With competitive elections unlikely in the foreseeable future, Gordon and Li (2012, this volume) consider options that the CCP might consider should it wish to strengthen public sector efficiency, weighing the pros and cons of retail sales taxes, value-added taxes, and property taxes under market socialism. They further suggest user fees as an option. To the extent that local governments compete for users who value the public goods those fees finance, a more efficient local governments – that is, one that provides more or better public goods for lower user fees –

earns higher tax revenues, all else equal. However, they caution, user fees evoke inequality problems. Poorer families might not send their children to school since if school user fees appear prohibitive, for example, planting the seeds of future economic and social problems.

Hukou reform, they argue, is most likely consistent with improved resource allocation. Because rural-to-urban and poor-to-rich region migration is already occurring, they argue that integrating migrants and educating their children should be a priority if the government wishes to avoid entrenching inequality problems. They suggest that hukou reform and the formalization of farm land ownership and sales would allow migrants to arrive better positioned to contribute to their new communities and the rationalization of land use in rural areas. After hukou reforms, the original Tiebout (1956) model would apply directly. In competing for taxpaying residents, local governments would be incentivized to provide whatever public goods residents were willing to pay for, and to provide them at the lowest possible cost in terms of taxes, fees, and other burdens.

4. Market Socialist Market Forces

China has made a substantial start towards full-fledged economic development under an economic model unfamiliar to Western economic historians. That system, Market Socialism with Chinese Characteristics, is not "capitalism in a Mao suit", despite popular reports of China's alleged embrace of capitalism. Extensive regulatory, legal, and administrative reforms that evoke developed market economies' institutions are deliberately superficial. While market forces function, to an extent, these reforms cloak an economy whose commanding heights remain unambiguously subject to Party control. That control flows through a traditional Chinese command and control mechanism, an unassailable civil service.

This system is delivering rapid economic growth, thereby restoring legitimacy to the CCP after disastrous misadventures such as the Great Leap Forward and the Cultural Revolution, and troubling incidents such as the student protests of 1989 and increasingly commonplace labour unrest since 2000. The socialist and Chinese aspects of China's economic system, at least as much as its market aspects, are seen by top Party cadres as crucial to this success (Macgregor 2010).

The socialist foundation of China's economic system is the unconditional supremacy of the Chinese Communist Party. Consistent with Marxist-Leninist tradition, the Party directs the law. Regulations, laws, and administrative rulings are applied in accordance with current Party policy. Just as a Party position corresponds directly to each key position in government, a Party hierarchy parallels corporate governance in banks, SOEs, listed non-SOEs, hybrid enterprises, joint ventures, and sufficiently large private businesses. Party cells throughout business enterprises constitute parallel internal accountability systems to those established by enterprises themselves, keeping an enterprise's Party Secretary and Party Committee up-to-date and able to provide timely advice to its CEO and board. Imported corporate governance regulations, mandating independent directors and the like essentially ignore Party involvement in enterprise governance.

The most uniquely Chinese characteristic of Market Socialism with Chinese Characteristics is the CCP's reliance on compensation and promotion incentives throughout an all-encompassing civil service to effect Party policies. Presiding over a more prosperous village, township, city, SOE, non-SOE, province, or industry appears genuinely important in advancing a cadre's career. Luck may be imperfectly distinguished from good governance, and loyalty may too often trump competence; but a degree of genuine meritocracy is evident in empirical studies of promotions (Landry 2008), and Party training programs are increasingly rigorous and

technocratic. These developments may explain why China's seemingly weak institutions deliver better economic results that do other countries with seemingly equivalently weak institutions.

Market forces affect economic decisions, in that most prices are no longer centrally administered and SOEs no longer receive production quotas from central planners. Profits motivate the allocation of many resources and the organization of much economic activity; and entrepreneurs can set up new businesses where demand arises if they can find financial backing. But the ongoing proletarian dictatorship of the CCP and Party oversight of human resource management decisions throughout the economy make China a severely qualified market economy. "Market" is rightly a mere adjective and only one fifth of Market Socialism with Chinese Characteristics.

High-income market economies depend on high-quality government to set limits, arbitrate disputes, and enforce rules (North 1991). Elsewhere, this entails checks and balances on officials to prevent abuse. China's leaders appear interested in developing such checks and balances, but while retaining the Party's primacy. That this choice is feasible remains unclear.

This may not matter greatly for a time. China's economy is still catching up. Huge potential for growth requires capital only for more off-the-shelf technology to produce consumer goods, housing, and automobiles of acceptable quality for an expanding middle class. China validates the argument of Aghion et al (2006) that catch-up growth demands less of business leaders than does the sustained growth of a high-income economy. Passably talented Party cadres can import foreign machinery, produce generic goods amid passably restrained corruption, and still greatly improve living standards for many years. But ultimately, China will find itself where South Korea and other nouveaux riches Asian economies now stand. Off-the-shelf is no longer good enough: Korean firms must now produce innovations – technologically superior cars, appliances, or electronics – to continue growing. That requires capital for innovators, rewards for creativity, a tolerance for disruptive innovation, and acceptance of the destruction of stagnant business so their resources can be reallocated to better uses (Acemoglu et al. 2006; Fogel et al. 2008).

That the CCP OD might reliably do this raises reservation (Aghion et al. 2006). Bureaucracies typically resist innovation and instability (Wilson 1989), yet accommodating both seems the essential element behind capitalism's sustained success (Schumpeter 1911). Can Market Socialism with Chinese Characteristics do this too? Or must China's leaders decide between sustained economic growth and preserving the Party's leading role?

Several chapters – Allen and Shen (2012, this volume), Allen et al. (2012, this volume), and Piotroski and Wong (2012, this volume) – see this binary choice approaching. Allen et al. argue that, if China's leaders desire a permanent place for their country amid the ranks of developed economies, they would best consider embracing capitalism fully. They argue that more efficient capital allocation can be achieved if China privatizes its large banks so as to render their lending decisions meaningfully independent of government policy. They add full-fledged bankruptcy reform as an essential complement to bank privatization because even thoroughly independently run banks' lending decisions will accord with officials' preferences, rather than economic fundamentals, if government and Party officials continue determining whether or not, and how severely, the bankruptcy code is to be applied on a case-by-case basis. They echo Allen and Shen (2012, this volume) and Piotroski and Wong (2012, this volume) in concluding that China's stock markets remain incapable of allocating capital efficiently, and perceive this deficiency important even if banks are privatized because bank financing is less agile than stock market at capitalizing new industries.

Many in China's media and leadership seemingly concur, calling for "deeper structural reform". The chapters argue that this is the simpler path because it is a well-trodden. Liberal economics and democratic politics are far from perfect: their stock markets and banking systems undergo occasional manias and panics, and their politics can go badly awry. But they are the only proven path to high living standards sustained over the long run (Fukuyama 1992).

Stock markets allocate capital by raising and lowering firms' share prices. Higher share prices, all else equal, let firms raise capital more cheaply (Tobin 1984). If a stock market is to allocate capital efficiently, investors must have access to low cost information about firms whose shares they must value (Rajan and Zingales 1998; Wurgler 2000). China's disclosure regime looks sophisticated, but Piotroski and Wong (2012, this volume) argue that actually leaves listed firms profoundly opaque because politics prevents uniform adherence to disclosure rules and consistent penalization for their violations. If stock markets are to promote prosperity, shareholders must peer into firms so they can put their money into ventures they deem profitable. Different firms' top managers provide different choices to shareholders in developed capitalist economies by devising unique, creative, and idiosyncratic strategies, products, and policies. If China's leaders desire more efficient capital allocation, they might loosen Party over corporate decision-making so individual firms can pursue genuinely new and different paths that shareholders can genuinely evaluate, and either endorse or spurn.

A thoroughgoing conversion to free markets is only one possible option. Moreover, as Allen and Shen (2012, this volume) stress, such a conversion would have to be epiphanic. The Party would have to cede the economy's Commanding Heights, entrusting the allocation of capital, labour, and other resources to market forces, delegating the rule of law to an independent and impartial judiciary, and authorizing regulatory powers to an independent civil service. Even such basic concepts as a CCP OD promoting people through top positions in banks, companies, regulatory agencies, and governments would be at risk, relegating managers' careers to a market for talent.

Is acquiescence to capitalism only a matter of time? Looking forwards, even if SOE banks are not privatized, Allen et al. foresee foreign banks and credit cooperatives as a potentially impartial source of loans to the hybrid sector. They also argue that China's growth might be furthered by US-style private equity and venture capital funds, also capable of capitalizing that sector. But none of their suggestions seem feasible as incremental adaptations within the current framework of Market Socialism with Chinese Characteristics. For example, the rule that any business with more than three employees who are Party members must accept a Party Cell would surely apply to venture capital or private equity financed firms. Venture capital and private equity fund would presumably also benefit from Party Secretaries, Party Committees, and Party cells. Foreign banks, for example, must accept Party Cells and heed advice from Party cadres. Fully privatized banks would still have Party Committees and party Secretaries, and the Party cannot presume to retain the economy's Commanding Heights without retaining control over the judiciary.

A more likely scenario, in the view of most authors in this volume, is that China will persist in forging its own path towards sustainable prosperity under the continuing guidance of the Party. Market Socialism with Chinese Characteristics has delivered – so far. But Hayek's (1941, 1945) essential critique of socialism stands unrefuted: information and coordination costs rise faster with scale and complexity in a command and control economy than in a market economy.

Pistor (2012, this volume) describes a broader range of capitalisms than most Anglophone economists usually consider. For example, postwar France achieved three decades of dramatic recovery while scorning Anglo-Saxon naïvety about market forces. The French did almost everything "wrong". They entrusted the governance of large business enterprises to excivil servants, corporate investment decisions to industry-level ministry personnel, and corporate finance to SOE banks. While the system now shows growing strain – high youth and minority unemployment, aging capital assets, entitled public sector unions, and so on (Smith 2004) – France sustains a high per capita GDP and an enviable quality of life. Were China to attain similar success from a like system, much of her populace would celebrate.

But is this feasible? Postwar France was an open economy, a founding member of the precursor to today's European Union. Regulations, politicized approval processes, and the omnipresent helpful supervision of Party Cells and Party Secretaries perhaps allow the Chinese government latitude for poor policy that European integration denied France. Postwar France also had competitive democratic governments, with rival parties vocally criticizing each others' policies despite sharing a common corporatist vision, and a free press that enthusiastically skewered sufficiently egregious corruption, waste, or fraud. Though China now allows contested elections at the lowest levels of municipal government and tolerates a degree of media dissent unthinkable under Mao, it remains a one-party state with a controlled press. The postwar French civil service was a genuine meritocracy: entry depended only on academic evaluation, and success depended on performance. China seems intent on something along these lines too, but Party loyalty still counts for much.

Allen et al. (2012, this volume) argue that other Chinese characteristics of China's institutional syncretism – Confucian behavioural norms, traditional dispute resolution, and cultural standards lauding family and reputation – also help explain China's success, and often substitute effectively for formal legal codes and regulations. However, this constrains economic activity to channels in which these traditional mechanisms operate, enhancing the importance of connections and kinship.

If aging Communist leaders increasingly overtly favour their "princeling" sons, a meritocracy may become unsustainable. China's leadership appears to appreciate problems arising from Party "princelings" disgracing their stalwart parents, but business princelings growing to resemble pre-liberation bourgeois and aristocrats is a more difficult problem. If China develops fully in a single generation, as South Korea did, entrenched princelings might matter little. But Korea ultimately embraced the full complement of free market institutions, which China thus far declines. If China's heretofore successful economic trailblazing ultimately takes longer, unqualified business princelings could become an entrenched oligarchy more reminiscent of Latin America than of France or South Korea.

The end of the Cold War and the failure of third world Middle Ways, such as Latin American corporatism and India's License Raj, leaves variants of free market economics the only off-the-shelf choices on offer (Fukuyama 2011). Even the US financial crisis of 2008, despite evoking voluble calls for better regulation, inspires no visionary new alternatives to capitalism. Even France, hailing European integration and driven by fiscal necessity, is slowly shedding its postwar system. Pragmatism may well push China towards more genuine free market economics, and recognition of the information problems inherent in centralized bureaucratic control may well render Market Socialism's characteristics progressively less Chinese.

Institutional change often requires a crisis to dislodged entrenched interest groups (Olson 2000), so Allen et al. (2012, this volume; see also Allen and Gale 2004, 2007) may well correctly foresee successive internal crisis reforming and strengthening Chinese institutions. In this context, Xu's (2012, this volume) discussion of this chapter, which highlights China's relative immunity to both the 1997 and 2008 financial crises, may bode ill for China's long-term prosperity. Xu argues that a guarded embrace of capitalism might be warranted for stability's sake. But Olson (2000) argues that efforts to promote stability often inhibit efficient resource allocation, and thus has costs. Hsieh and Klenow (2009) estimate that China's mean firm-level total factor productivity would have grown 2% faster every year were Chinese firms relocated to the United States.

Nonetheless, a common denominator throughout the chapters in this volume is the overarching public policy objective of safeguarding uncontestable Party control over the commanding heights of the Chinese economy. The chapters in this volume caution that a range of increasingly serious economic inefficiencies are likely if the Party assigns an overarching value to the persistent stability of the current regulatory system. Alternative approaches to regulation merit consideration if the Party wishes to enhance the economic efficiency of financial markets (Alen and Shen, 2012, this volume; Allen et al., 2012, this volume), the banking system (Allen et al., 2012, this volume), information intermediation (Piotroski and Wong, 2012, this volume), public goods provision (Chen, 2012, this volume), corporate governance (Pistor, 2012, this volume), labor allocation (Gordon and Li, 2012, this volume), and risk-taking (Alen and Shen, 2012, this volume; Allen et al., 2012, this volume; Bayoumi et al., 2012, this volume; Young et al., 2012, this volume).

The chapters of this volume also largely concur that Market Socialism with Chinese Characteristics is a surprisingly unique and innovative economic system that has achieved spectacular results. But a second common theme we distill from the chapters as a whole is the system's continuation risks increasingly inefficient resource allocation, rising social problems, and magnified instability in the impending future. Different chapters assess the pros and cons of different policy options, but a common theme emerges throughout: If China's leaders aspire to guide their country into ranks of high income economies, looking beyond Market Socialism with Chinese Characteristics appears inevitable. The most straightforward option is convergence towards the proven, albeit intermittently fallible, genuinely market-driven systems of the advanced industrial democracies. But another possibility is that, bolstered by the past decades' successes, China will continue forging a unique path forward. Having embraced Deng Xiaoping's call to "let a few people get rich first," China's next step is genuinely inscrutable.

References

Acemoglu, Daron, Philippe Aghion & Fabrizio Zilibotti. 2006. Distance to Frontier, Selection, and Economic Growth. *Journal of the European Economic Association* 4(1) 37-74.

Aghion, Philippe, Costas Meghir & Jérôme Vandenbussche. 2006. Distance to Frontier, Growth, and the Composition of Human Capital. *Journal of Economic Growth* 11(2) 97-127.

Allen, Franklin & Douglas Gale. 2004. Financial Intermediaries and Markets. *Econometrica* 72, 1023-1061.

Allen, Franklin & Douglas Gale. 2007. *Understanding Financial Crises, Clarendon Lectures in Finance*. Oxford University Press, Oxford.

Allen, Franklin, Jun Qian, Chenying Zhang & Mengxin Zhao. 2012. China's Financial System: Opportunities and Challenges. In Joseph Fan and Randall Morck, eds. *Capitalizing China*,

- c. 3. National Bureau of Economic Research and University of Chicago Press, forthcoming.
- Allen, Franklin., Jun Qian & Meijun Qian. 2008. "China's Financial System: Past, Present, and Future," in *The Transition that Worked: Origins, Mechanism, and Consequence of China's Long Boom*, edited by L. Brandt and T. Rawski, Cambridge University Press.
- Allen, William T. & Han Shen. 2012. Assessing China's Top-Down Securities Markets. In Joseph Fan and Randall Morck, eds. *Capitalizing China*, c. 4. National Bureau of Economic Research and University of Chicago Press, forthcoming.
- Baumol, William J., 1990. Entrepreneurship: Productive, Unproductive, and Destructive. The *Journal of Political Economy* 98, 893-921
- Bayoumi, Tamim, Hui Tong & Shang-Jin Wei. 2012. The Chinese Corporate Savings Puzzle: A Firm-level Cross-country Perspective. In Joseph Fan and Randall Morck, eds. *Capitalizing China*, c. 7. National Bureau of Economic Research and University of Chicago Press, forthcoming.
- Bertrand, Marianne, Francis Kramarz & Antoinette Schoar & David Thesmar. 2010. Politicians, Firms, and the Political Business Cycle. MIT Sloan School working paper.
- Chamon, Marcos & Eswar Prasad. 2008. Why are Saving Rates of Urban Households in China Rising? NBER Working Paper No. 14546.
- Chamon, Marcos, Kai Liu & Eswar Prasad. 2010. Income Uncertainty and Household Savings in China. NBER Working Paper No. 16565.
- Chen, Zhiwu. 2012. Financial Strategies for Nation Building. In Joseph Fan and Randall Morck, eds. *Capitalizing China*, c. 8. National Bureau of Economic Research and University of Chicago Press, forthcoming.
- Coase, Ronald H., 1937, "The Nature of the Firm," Economica, 4, 386-405.
- Deng, Yongheng, Randall Morck, Jing Wu & Bernard Yeung. 2011. Monetary and Fiscal Stimuli, Ownership Structure, and China's Housing Market. NBER Working Paper No. 16871.
- Easterly, William. 2006. The White Man's Burden: Why The West's Efforts To Aid The Rest Have Done So Much Ill And So Little Good. Penguin, New York.
- Edwards, Sebastian. 2011. *Left behind: Latin America and the false promise of populism.* University of Chicago Press, Chicago.
- Fan, Joseph P.H., T.J. Wong & Tianyu Zhang. 2007. Politically Connected CEOs, Corporate Governance and Post-IPO Performance of China's Partially Privatized Firms. *Journal of Financial Economics* 84(3) 330-357.
- Fan, Joseph, P.H. & Randall Morck, eds. 2012. Capitalizing China. National Bureau of Economic Research and University of Chicago Press, forthcoming.
- Fan, Joseph, P.H., Li Jin & Guojian Zheng. 2010. Revisiting The Bright and Dark Sides of Capital Flows in Business Groups. Chinese University of Hong Kong working paper.
- Fogel, Kathy, Morck, Randall, Yeung, Bernard, 2008. Big Business Stability and Economic Growth: Is What's Good for General Motors Good for America? *Journal of Financial Economics* 89, 83-108
- Freeman, Richard. 2006. The Great Doubling: The Challenge of the New Global Labor Market. Harvard University working paper.
- Fukuyama, Francis. 1992. *The End of History and the Last Man*. Maxwell Macmillan, Toronto. Fukuyama, Francis. 2011. *The Origins of Political Order: From Prehuman Times to the French Revolution*. Farrar, Straus and Giroux.

- Garnaut, Ross, Song Ligang & Yao Yang. 2006. Impact and Significance of State-Owned Enterprise Restructuring in China. *The China Journal* 55 35-63
- Gordon, Roger & Wei Li. 1995. The Change in Productivity of Chinese State Enterprises. *Journal of Productivity Analysis* 6(1)5-26.
- Gordon, Roger & Wei Li. 2012. Provincial and Local Governments in China: Fiscal Institutions and Government Behavior. In Joseph Fan and Randall Morck, eds. *Capitalizing China*, c. 9. National Bureau of Economic Research and University of Chicago Press, forthcoming.
- Haber, Stephen. 2000. Political Institutions and Economic Growth in Latin America: Essays in Policy, History, and Political Economy. Hoover Institution Press, Stanford CA.
- Hayek, Friedrich. 1941. The Pure Theory of Capital. University of Chicago Press.
- Hayek, Friedrich. 1945. The Use of Knowledge in Society. *American Economic Review* 35, 519-530.
- Heilbrunn, John. 2005. Oil and Water? Elite Politicians and Corruption in France. *Comparative Politics* 37(3)277-96.
- Hsieh, Chang-Tai & Peter Klenow. 2009. Misallocation and Manufacturing TFP in China and India. *Quarterly Journal of Economics* 124, 1403-1448.
- Huang, Yasheng. 2008. *Capitalism with Chinese Characteristics*. New York: Cambridge University Press.
- Jacques, Martin. 2009. When China Rules the World: The Rise of the Middle Kingdom and the End of the Western World. Penguin, London.
- Jensen, Michael. 1986. Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *American Economic Review* 76(2)323-29.
- Jin, Li Myers, Stewart C. 2006. R2 around the world: New theory and new tests. Journal of Financial Economics 79, 257–292.
- Jin, Li. 2012. Discussion of "Institutions and Information Environment of Chinese Listed Firms" by Joseph D. Piotroski and T.J. Wong. In Joseph Fan and Randall Morck, eds. *Capitalizing China*, National Bureau of Economic Research and University of Chicago Press, forthcoming.
- Johnson, Simon, Rafael La Porta, Florencio Lopez-de-Silanes & Andrei Shleifer. 2000. Tunneling, *American Economic Review* 90(2)22-27.
- Khanna, Tarun. 2008 Billions of Entrepreneurs: How China and India Are Reshaping their Future and Yours. Harvard Business School Press.
- Knight, Frank. 1921. Risk, Uncertainty and Profit. Houghton Mifflin Company, Boston.
- Kramarz, Francis & David Thesmar. 2006. Social Networks in the Boardroom. HEC Paris working paper.
- Kuznets, Simon. 1955. Economic Growth and Income Inequality. *American Economic Review* 45(2)1-28.
- La Porta, Rafael, Florencio Lopez-de-Silanes & Andrei Shleifer. 2002. Government Ownership of Banks. *Journal of Finance* 57(1)265-301.
- Landry, Pierre. 2008. Decentralized Authoritarianism in China: the Communist Party's control of local elites in the post-Mao era. Cambridge University Press.
- Lequiller, François & Derek Blades. 2006. Understanding National Accounts. OECD: Paris.
- Li, Hongbin & Li-An Zhou. 2005. Political Turnover & Economic Performance: The Disciplinary Role of Personnel Control in China. *Journal of Public Economics* 89(9/10)1743-62.

- Li, Hongbin, Lingsheng Meng, Qian Wang & Li-An Zhou. 2008. Political connections, financing and firm performance: Evidence from Chinese private firms. *Journal of Development Economics* 87(2)283-299.
- Li, Wei. 1997. The Impact of Economic Reforms on the Performance of Chinese State-Owned Enterprises. *Journal of Political Economy* 105(5)1080–1106.
- Li, Zhigang. 2012. Discussion of "Provincial and Local Governments in China: Fiscal Institutions and Government Behavior" by Roger H. Gordon and Wei Li. In Joseph Fan and Randall Morck, eds. *Capitalizing China*, National Bureau of Economic Research and University of Chicago Press, forthcoming.
- Lü, Xiaobo. 2000. Cadres and Corruption: The Organizational Involution of the Chinese Communist Party. Stanford University Press.
- Macdonald, James. 2003. A Free Nation Deep in Debt: The Financial Roots of Democracy. Farrar, Straus and Giroux.
- Macgregor, Richard. 2010. The Party: The secret world of China's communist rules. Harper-Collins.
- Maddison, Angus & Harry X. Wu. 2008. Measuring China's Economic Performance. *World Economics* 9(2)13-44.
- Modigliani, Franco & Richard Brumberg. 1954. Utility Analysis and the Consumption Function: An Interpretation of Cross-Section Data. In K. Kurihara, ed. *Post-Keynesian Economics*. New Brunswick: Rutgers University Press, pp. 388-436.
- Morck, Randall & Masao Nakamura. 2007. Business Groups and the Big Push: Meiji Japan's Mass Privatization and Subsequent Growth. *Enterprise and Society* 8(3) 543-601.
- Morck, Randall, Daniel Wolfenzon & Bernard Yeung, 2005. "Corporate Governance, Economic Entrenchment, and Growth," Journal of Economic Literature, 43(3), 655-720.
- Morck, Randall, Bernard Yeung and Wayne Yu. 2000. The Information Content of Stock Markets: Why Do Emerging Markets Have Synchronous Stock Price Movements? *Journal of Financial Economics*. 58(1) Oct. 215-260.
- Morck, Randall. 2011. Finance and Governance in Developing Economics. National Bureau of Economic Research working paper 16870.
- Murphy, Kevin M., Shleifer, Andrei, Vishny, Robert W., 1991. The Allocation of Talent: Implications for Growth. *Quarterly Journal of Economics* 106 2, 503-30
- Murphy, Kevin, Andrei Shleifer & Robert W. Vishny. 1989. Industrialization and the Big Push. *Journal of Political Economy* 97(5)1003-26.
- Nee, Victor & Sonja Opper. 2011. Capitalism from Below: Markets and Institutional Change in China. Harvard University Press, forthcoming.
- North, Douglass. 1991. Institutions. *Journal of Economic Perspectives* 5(1)97–112.
- Olson, Mancur, 2000. Power and Prosperity: Outgrowing Communist and Capitalist Dictatorships. Basic Books, New York.
- Piotroski, Joseph D. & T.J. Wong. 2012. Institutions and Information Environment of Chinese Listed Firms. In Joseph Fan and Randall Morck, eds. *Capitalizing China*, c. 5. National Bureau of Economic Research and University of Chicago Press, forthcoming.
- Pistor, Katharina. 2012. The Governance of China's Finance. In Joseph Fan and Randall Morck, eds. *Capitalizing China*, c. 2. National Bureau of Economic Research and University of Chicago Press, forthcoming.
- Prasad, Eswar. 2009. Rebalancing Growth in Asia. NBER Working Paper No. 15169.

- Rajan, Raghuram & Luigi Zingales. 1998. Financial Dependence and Growth. *American Economic Review* 88(3)559-86.
- Rosenstein-Rodan, Paul. 1943. Problems of Industrialisation of Eastern and South-Eastern Europe. *Economic Journal* 53(210/1) 202-11.
- Schumpeter, Joseph. 1911. *Theorie der Wirtschaftlichen Entwicklung*. Duncker & Humblot, Leipzig.
- Smith, Timothy. 2004. France in Crisis: Welfare, Inequality & Globalization since 1980. Cambridge University Press.
- Song, Zheng. 2012. Discussion of "The Governance of China's Finance" by Katharina Pistor. In Joseph Fan and Randall Morck, eds. *Capitalizing China*, National Bureau of Economic Research and University of Chicago Press, forthcoming.
- Spence, Jonathan D. 1999. The Search for Modern China. Norton, New York.
- Stigler, George. 1971. Theory of Economic Regulation. Bell Journal of Economics 3(1)3-18.
- Tiebout, Charles. 1956. A Pure Theory of Local Expenditures. *Journal of Political Economy* 64, 416-424.
- Tobin, James. 1984. On the Efficiency of the Financial System. *Lloyd's Bank Review* 153, 14-15. Veblen, Thorstein. 1921. *Engineers and the Price System*.
- Veblen, Thorstein. 1921. The Engineers and the Price System. Huebsch, New York.
- Wang, Xiaolu & Wing Thye-Woo. 2011. The Size and Distribution of Hidden Household Income in China. *Asian Economic Papers* 10(1)1-26.
- Wei, Shang-Jin & Xiaobo Zhang. 2011. The Competitive Saving Motive: Evidence from Rising Sex Ratios and Savings Rates in China, Journal of Political Economy, forthcoming.
- Wilson, James. 1989. Bureaucracy: What Government Agencies Do and Why They Do It. Basic, New York.
- Wu, Harry. 2006. The Chinese GDP Growth Rate Puzzle: How Fast Has the Chinese Economy Grown? Hong Kong Polytechnic University Business School working paper.
- Wurgler, Jeffrey. 2000. Financial Markets and the Allocation of Capital. *Journal of Financial Economics* 58 1-2, 187-214.
- Xu, Chenggang. 2011. Institutional Foundations of China's Reform and Development. *Journal of Economic Literature*, forthcoming.
- Xu, Chenggang. 2012. Discussion of "China's Financial System: Opportunities and Challenges" by Franklin Allen, Jun Qian, Chenying Zhang & Mengxin Zhao. In Joseph Fan and Randall Morck, eds. *Capitalizing China*, National Bureau of Economic Research and University of Chicago Press, forthcoming.
- Yang, Dennis Tao, Junsen Zhang & Shaojie Zhou. 2012. Why are Saving Rates so High in China? In Joseph Fan and Randall Morck, eds. *Capitalizing China*, c. 6. National Bureau of Economic Research and University of Chicago Press, forthcoming.
- Yang, Jisheng. 2008. Tombstone: A Record of the Great Chinese Famine of the 1960s. Cosmos Books, Hong Kong.
- Yergin, Daniel & Joseph Stanislaw. 1998. The Commanding Heights: The Battle between Government and the Marketplace that is Remaking the Modern World. New York: Simon & Schuster.
- Young, Leslie. 2012. Discussion of "Why are Saving Rates so High in China?" by Dennis Tao Yang, Junsen Zhang & Shaojie Zhou. In Joseph Fan and Randall Morck, eds. *Capitalizing China*, c. 6. National Bureau of Economic Research and University of Chicago Press, forthcoming.

- Yu, Wei. 2009. *Party Control in China's Listed Firms*. Ph.D. Dissertation, The Chinese University of Hong Kong.
- Zhu, Ning. 2012. Discussion of "The Chinese Corporate Savings Puzzle: A Firm-level Cross-country Perspective" by Tamim Bayoumi, Hui Tong & Shang-Jin Wei. In Joseph Fan and Randall Morck, eds. *Capitalizing China*, National Bureau of Economic Research and University of Chicago Press, forthcoming.