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Abstract

China will soon surpass the U.S. as the world's largest economy, a position it last enjoyed at the time of the Industrial Revolution. None of this was predictable. Over much of the 19th and 20th centuries, China was a laggard, and a huge gap emerged in the level of development with the world's most advanced countries as China's economic, political and social institutions were slow to adapt. Only with the onset of economic and political reform in the late 1970s has China put itself on a trajectory of sustained rapid economic growth, resulting in a narrowing of the gap. For China to achieve the ranks of the most advanced countries in per capita terms, further economic and political reform are required.

Introduction

Since the onset of economic reform in the late 1970s, China has enjoyed rates of growth in real GDP in the vicinity of 8 percent per year, and the Chinese economy today is nearly fifteen times larger than it was 35 years ago (NBS 2010). Of course, on a per capita basis, GDP in Purchasing Power Parity (PPP) terms is still only one-fifth of that in the most advanced countries.¹ However, with a population of nearly 1.3 billion, the Chinese economy is on track in the next few years to surpass that of the U.S. as the world's largest. By fact of its size and high growth rate, China's economy is currently the source of around twenty percent of the annual growth in global GDP. Today, China figures prominently in nearly every pressing international issue from global recovery to global warming.

This is not the first time in history that the Chinese economy was quantitatively so important. Estimates of Dwight Perkins (1967) and Angus Madisson (2007) suggest that with a population in excess of 300 million, at the end of the eighteenth century the Chinese economy was producing close to a quarter of the world's GDP.² Moreover, Kenneth Pomeranz (2000), Li

¹ Based on estimates from the World Bank's International Comparison Program database, www.databank.worldbank.org, accessed May 29, 2012.

² Comparable estimates by the Conference Board for 2011 are 15.8% for China and 18.6% for the U.S., respectively. Estimates are taken from <http://www.conference-board.org/data/globaloutlook.cfm>, accessed February 17, 2012.

Bozhong (2000) and others contend that in China's most advanced localities, including the Jiangnan region in the Lower Yangzi, and the Pearl River Delta, China achieved a level of development and standard of living that may have paralleled that in the more advanced parts of Europe.³

China's exact level of development at the end of the eighteenth century is a source of ongoing academic debate (Allen et. al. 2011). Probably much less in dispute is the economy's trajectory, and the fact that for much of the next 150-175 years or so, China became an economic laggard. As a result, the gap in most measurable indicators of the level of economic and social development between China and the rapidly industrializing countries in the West, and later, Japan and the Asian Tigers (Korea, Hong Kong, Taiwan and Singapore) only widened until the onset of economic reforms in the late 1970s began to reverse the trend.

The Long Fall before the Rise

The nineteenth century was not kind to China and a combination of external shocks and internal disruption (the White Lotus Rebellion, 1796-1805 and the Taiping Rebellion, 1850-1864) revealed critical weaknesses in its traditional institutions and political economy. In the

³ Similarities in the local economies extended from a high level of commercialization and market development, to rates of literacy, land productivity, and development of the non-agricultural sector, as well as household demographic behavior. Pomeranz (2000) also argues that China and Europe shared a common land constraint, which becomes the important point of departure for the two regions in his analysis.

historiography of China for the period, probably no event has taken on more import — symbolic or otherwise — than the Opium Wars.

Prior to the 1800s, China's trade with the rest of the world was a highly imbalanced affair, with Chinese exports of tea, silk and porcelains helping to finance imports of New World silver that supported the rising commercialization in the economy.⁴ British merchants, frustrated by the difficulty of penetrating the Chinese market and the constraints of the "Canton" system⁵, lobbied London for the better part of half of a century to obtain wider access from China for their goods and wares. Britain largely failed, but in the context of a triangular trade involving India, merchants found a market for opium in China.

The rise in opium imports the first third of the nineteenth century was accompanied by a shift in China's balance of payments and a reversal of longstanding silver inflows. Believing that these

⁴ Overall, these exports represented a relatively small percentage of the Chinese economy. On an annual basis, so were the silver imports, but on a cumulative basis they were huge and the major source of the increase in China's money supply during the seventeenth and eighteenth centuries.

⁵ The Canton (present day Guangzhou) system required that all trade between China and European countries go through that city, and further limited involvement on the Chinese side to a guild of merchants (the *cohong*) that had been extended monopoly rights over this trade by the Qing government.

were “causally” linked⁶ and concerned about their negative impact, China tried to put an end to the opium trade, with war (First Opium War, 1839-1842) soon breaking out. British military superiority quickly won the day, and with the signing of the Nanking Treaty of 1842, China entered into the first of a series of treaties commonly referred to as the “Unequal Treaties”.⁷ Under the Nanking Treaty, China was required to make reparation payments to the victors, to open up four ports to international trade, and ceded Hong Kong to Great Britain for 150 years. Terms of future treaties dictated the opening up of additional treaty ports, the loss of tariff autonomy, and the extension of rights of extra-territoriality in the treaty ports themselves.

Through the last half of the nineteenth century, trade grew, but overall, the impact of this “forced” opening on the Chinese economy was geographically confined and relatively small (Murphey 1977). By the end of the century, imports and exports combined still represented no more than a few percentage points of GDP, and the Chinese economy looked very much like it did a century earlier: predominantly rural and agricultural. China also went through a costly and disruptive civil war (Taiping Rebellion), revealing further weakness in the authority and span of control of the central government. In contrast to Meiji Japan, and slightly earlier, continental

⁶ Recent research by Linn (2006) and Irigoien (2009) offers alternative explanations for the reversal in silver flows including the rising gold price of silver, falling domestic demand for silver, and a breakdown of the Spanish Peso Standard.

⁷ The Unequal Treaties refer to a series of treaties including the Treaty of Nanjing (1842), the Treaties of Tianjin (1858 and 1861), and the Treaty of Shiminoseki (1895) that were imposed on China by foreign powers during the nineteenth and early twentieth century, and which represented a loss of national sovereignty.

Europe, to which the Industrial Revolution successfully spread, Qing China was unable to leverage the benefits of openness and the economic advantages of backwardness, most notably, cheap labor and access to new technology and know-how, to put its economy on a new growth trajectory. The key obstacle here was a tightly-linked and well-entrenched set of economic, social and political institutions (Brandt, Ma and Rawski 2011), which were very slow to adapt. In some cases, these interests blocked outright the transfer of new technology and know-how essential to modern economic growth (Brown 1979). More generally, government-led modernizing efforts were weak and ineffective (Perkins 1967).

Over time new pressures in China originating from within the treaty port sector as well as outside helped to erode some of these centuries-old institutions, and on the margin modernization efforts began to take hold. The end of prohibition on foreign factories in the treaty ports, for example, sparked a rise in foreign direct investment (FDI) centered on Shanghai and the Lower Yangzi, and indirectly helped to foster the development of private business in China. The introduction of the steamship and the construction of a number of major railroad lines complemented a well-developed system of traditional transport, and reduced transportation costs. A modern banking system also emerged, and with it paper currency spread once again as the most important medium of exchange in the Chinese economy. Governmental reform proceeded, both during the final years of the Qing (1644-1911), and then through the Republican period (1911-1949), however not without frequent setbacks. All of the above changes were complemented by a slow makeover in the fabric of Chinese society, a product of new paths of upward economic and social mobility (Yuchtman 2010).

How far did this proceed? Estimates of John Chang (1969), Thomas Rawski (1989) and others suggest that through the first three decades of the twentieth century these forces propelled growth in China's modern sector (industry, finance, transportation, and so on) , and promoted structural change in the economy. Moreover, two important regions, namely, the Lower Yangzi and the Northeast, may have experienced the onset of modern economic growth, i.e. sustained increase in per capita incomes, as increases in the modern sector were either complemented by growth in agriculture and the traditional non-agricultural sectors, or at minimum offset any reduction in their size (Ma 2008, Mizoguchi and Umemura 1988).

Assessments at the aggregate level are much harder. At its peak, and after growing through the first three decades of the twentieth century at a rate of 8 percent per annum, the modern sector still never represented more than fifteen percent of GDP (Liu and Yeh 1965). A majority of the population continued to live in the countryside and derived a livelihood from either agriculture – the source of two-thirds of GDP in the mid-1930s – or the traditional non-agricultural sector, which included handicraft industry, commerce and transport. Unfortunately, existing data only allow estimates of growth in the farm/traditional sector with relatively wide margins of error. More than likely, there was enormous heterogeneity in the impact of these developments on the rural economy, with some areas benefitting from growing demand and links with a small but dynamic urban economy, while others were largely cut-off, or possibly adversely affected.

China appears to have weathered the impact of the Great Depression better than most. But the cities and countryside were badly disrupted soon thereafter. From 1937 to 1945 China was engaged in a costly war against Japan, in which the CCP (Chinese Communist Party) and KMT

(Kuomintang) joined together—at least in principle—to defeat the Japanese. Between 1945 and 1949, they would fight each other.

The Socialist Period: 1949-1978

With the defeat of the KMT in 1949 and their departure to Taiwan, the CCP inherited a badly devastated economy in the midst of hyperinflation. It also found itself facing an increasingly hostile international environment, and external threats. Ending the hyperinflation, completing land reform⁸, and economic recovery occupied much of the new government's attention the next few years. Shortly thereafter, and borrowing from the Soviet Union, China established a set of institutions that would help define the economic system for the better part of the next three decades.⁹ The essential features of the system included the nationalization of industry and state ownership, the elimination of markets in favor of an elaborate system of state planning, and the end of household farming and the re-organization of households in the countryside into rural collectives (Naughton 1995).¹⁰

⁸ Estimates of Charles Roll (1980) suggest that more than forty percent of farm land was redistributed through land reform. Several million individuals were also likely executed as part of efforts to consolidate control over the countryside.

⁹ In the 1950s, China also benefitted from Soviet aid, but by the late 1950s the relationship had soured.

¹⁰ There were some differences however, and Chinese planning was never as extensive as the Soviet Union's, and remained much more decentralized (Wong 1985).

The system was highly successful in mobilizing resources and directing them to priority areas, notably, heavy industry, but inefficiencies of the sort inherent in any system of planning, and weak material incentives in industry and agriculture worked against this, as did Maoist policies promoting local self-sufficiency. These problems were exacerbated during episodes such as the Great Leap Forward (1958-1960) and the Cultural Revolution (1965-1976) when politics and ideological considerations figured even more prominently in economic policy-making.¹¹ Indeed, political failure and costly economic policies largely explain the huge loss of life estimated to be in upwards of 30 million associated with the Great Leap Famine between 1959 and 1961 (Peng 1987 and Dikotter 2010).

Estimates suggest that over this period Chinese real GDP grew 6 percent per annum and on a per capita basis at a rate of 4 percent¹², surpassing those in other large low-income countries such as India, Pakistan, Indonesia, Egypt and Brazil (Morawetz 1978). Industry's share of GDP also rose from only 10 percent in the early 1950s to nearly 45 percent by the late 1970s as new industrial and technological capabilities were developed (Perkins 1988). These numbers are misleading however. Under socialism growth occurred almost entirely along the extensive margin as a result of factor accumulation. Moreover, with total factor productivity (TFP) declining during much of the last half of the 1960s and up until the late 1970s, growth was sustained only by a rising share

¹¹ In both periods, for example, the right of households to farm small private plots was eliminated and the role of rural markets heavily curtailed.

¹² Estimates of the rate of growth during this period are sensitive to the choice of base-year for deflators. On this point, see Perkins and Rawski (2008).

of GDP channeled into investment. As a result, output per person increased, but consumption did not.

On the positive side, investments by the state in health, education and welfare combined with highly egalitarian systems of distribution within both the urban and rural sectors to deliver major improvements in life expectancy, maternal and infant mortality, and literacy. Overall however, average consumption languished: Rationing was pervasive and the material standard of living on the eve of economic reform was likely comparable to the level of two decades earlier (Lardy 1983). In the countryside, where more than eighty percent of the population lived and worked, calorie availability may have actually been lower.

The weak link here was Chinese agriculture, which failed to generate a growing marketable surplus that could be used to support a larger population outside of agriculture. Indeed, the percentage of the population living in the cities in 1978 – 18% – was no higher than it was fifteen years earlier (NBS 2010). Once again, the problems were system-related as any potential gains from increases in irrigated area, the use of new higher-yielding varieties and chemical fertilizers, and mechanization were more than offset by rising inefficiencies (Lardy 1983).

In the historiography of the People's Republic of China (PRC), the rural-basis of CCP support is often singled out in explaining their rise and defeat of the KMT. Paradoxically, through much of the first three decades of the PRC, agriculture was repeatedly under-valued, and this constituency largely ignored. Even using China's own "bare-minimum" poverty line for the period, the number of individuals living in poverty in the countryside was estimated to be in upwards of 250

million (Vermeer 1978), or a third of the Chinese rural population at that time. If one was to use the World Bank's \$US 1 a day as a benchmark, the number might actually be two times this. In addition, a huge gap also emerged in the incomes (and consumption) between those living in the countryside, and those fortunate enough to enjoy urban registration (Rawski 1982).

The Reform Era: 1978-Present

The end of the Cultural Revolution and death of Mao late in 1976 helped set in motion a process of economic and political reforms that have not fully played out. The risks and enormity of the task facing China's political elite at this juncture in Chinese history cannot be underestimated, if for no reason other than there was little in the way of international experience to help guide them in this difficult transition. On top of this, there were powerful vested interests to contend with that were the major beneficiaries of the old system. The huge economic dislocation that accompanied a similar process in Eastern Europe a decade or so later is a sobering reminder of the economic and political pitfalls that can easily accompany such a process (Svejner 2002).

Three and half decades of reforms have helped transform China from a highly closed, planned economy into an open, dynamic market economy in which the state plays a smaller, albeit still important, role. Reform has also extended to China's highly authoritarian political system (Xu 2011). Although the CCP maintains its monopoly on political power, reform has helped to transform the Party from the "personality-ruled party" under Mao to a "system governed by rules, clear lines of authority and collective-making decisions" (Shirk 1993); opened up party

membership to newly emerging groups, e.g. entrepreneurs; and tied political promotion at every level of the political hierarchy to economic growth. The highly decentralized nature of the Chinese economy inherited from the planning period played to reforms that “incentivized” cadre behavior in this way.

But at the outset, reform efforts were motivated by two more immediate concerns: food security, and a widening gap in productivity and living standards between China and its East Asian neighbors. Both threatened the legitimacy of the CCP. With agriculture continuing to falter, concerns of a return to famine-like conditions of the late 1950s were surfacing. Moreover, after nearly two decades of economic, political and social turmoil, the success of the Asian tigers, especially Taiwan, was an embarrassing reminder of earlier expectations and unfulfilled promises.

Rural reform, incremental opening of the economy to foreign trade and investment, enlivening state-owned enterprises (SOEs), and fiscal decentralization formed the core of the early reform initiatives. All were important but a case can be made that reform would not have proceeded very far without the early success in the countryside, which exceeded all expectations including those of China’s paramount leader, Deng Xiaoping (Vogel 2011). Moreover, we see in the rural reforms key elements of China’s success through the first phase of reform, namely, the ability to dismantle the old command economy without disrupting economic growth, and institutional innovation.

At the heart of the rural reform was the re-introduction of household farming through the Household Responsibility System (HRS). Under HRS, ownership rights to the land remained with the collective or village, and households were extended usufruct rights in return for meeting “fixed” rental-like obligations. Household incentives in farming were enhanced by price and marketing reforms. It is probably no irony that these reforms were first experimented with in the provinces of Sichuan and Anhui, two of the hardest hit provinces during the Great Leap Forward.¹³ Reforms spread rapidly to other provinces, and by 1983 ninety-five percent of all households were under HRS.

The rapid growth in farm output—grain production increased by a third between 1978 and 1984 with output of cash crops and farm sidelines growing even more rapidly—helped to solve the immediate “food” problem, and simultaneously freed up huge amounts of labor formerly trapped in collective agriculture (Lin 1992). New outlets emerged for this labor in the form of small family-run enterprises and collectively-owned and managed township and village enterprises (TVEs), the growth of which also benefitted from the rapid rise in incomes and liberalization of the non-farm sector in the countryside. Between 1978 and 1995, employment in rural TVEs grew by over 100 million, and in industry, their output increased to more than a third of the gross value of industrial output.¹⁴ This dynamism was especially evident in the coastal provinces, and

¹³ Institutional reforms similar to HRS were in fact implemented in these same two provinces in the early 1960s.

¹⁴ By the early 1990s, any remaining advantages enjoyed by the collectively-owned TVEs over privately owned firms disappeared, and as a result, they were privatized en masse.

built on the growth of commune and brigade-run enterprises of the socialist period, as well the human and social capital from the pre-1949 era that survived.

Isolated from the West for the better part of three decades, the importation of new technology and know-how and links with international production networks were viewed as critical to the modernization efforts of Chinese industry. In 1979, China cautiously set up four Special Economic Zones in the southern coastal provinces of Guangdong and Fujian to encourage Foreign Direct Investment (FDI) in labor-intensive export processing activity. The timing could not have been better, and coincided with rapidly rising labor costs facing entrepreneurs in Taiwan and Hong Kong who were involved in export activity. Local leaders outside these four zones were soon lobbying Beijing for similar powers and authority, and competition for FDI among regions intensified. Rapid growth of processing exports helped to relax a binding foreign exchange constraint, and China's early "embrace of globalism" (Branstetter and Lardy 2008) was extended to encouraging investment by multinational firms in strategic sectors. Entry was often limited to establishing joint ventures with state-owned firms, but in return for the transfer of managerial, organization and technical know-how, these firms were promised access to a potentially rapidly growing domestic market.

Outside of a relatively small collectively-owned sector, the urban economy and industry were initially dominated by state-owned enterprises. These same institutions were also important providers of housing and social services to individuals working in these firms. With no social safety net outside of these firms, reform options such as bankruptcy and layoffs were deemed politically infeasible at this time. As a result, through the first decade and a half of reform, efforts

focused on improving productivity within SOEs, while facilitating the growth of the economy outside of the state and plan.

SOE managers were extended new autonomy from supervisory agencies, and incentives were enhanced through profit retention and individual bonuses. Competition also increased through new entry. With the implementation of the “dual-track system,” firms were allowed to find new market outlets for their production after fulfilling plan obligations fixed at levels of the early 1980s. Retention of the planned component of output served two useful purposes: first, it helped to prevent the disruption to industry of the sort observed in Eastern Europe; and second, it minimized opposition to reform from those who would have lost the rents associated with control over planned allocation (Lau, Qian and Roland 2002). At the same time, production outside of the plan offered non-state firms access to key inputs. China soon grew “out of the plan” (Naughton 1995), and by the early 1990s, the planned component of industrial output was below twenty percent.

Last, these reforms were accompanied by a marked decentralization of China’s fiscal system, and an end to an older system in which the center effectively controlled revenues and expenditures at all levels of government. Combined with the existing decentralization over economic management and an increasingly meritocratic personnel system for cadres tied to economic growth, these changes gave local governments the incentive, the resources, and the policy tools to promote local economic growth with an intensity and determination rarely visible in other economies.

The first fifteen years of reform delivered impressive results that were widely enjoyed among nearly all segments of society. Poverty, which had been almost exclusively a rural problem dropped precipitously, and inequality fell early on with a narrowing in the urban-rural gap (Chen and Ravallion 2007). But problems loomed. Soft-budget constraints of firms in the state sector undermined incentives, and productivity growth in the state sector lagged significantly behind the more dynamic non-state sector which now extended to private enterprises. Only lending from the state-controlled banking system helped to sustain expansion and wage increases in the state sector on par with that outside, leaving non-performing loans to accumulate in the state-dominated banking system. In addition, decentralization in the fiscal system left the center without the fiscal resources needed to finance public investment and achieve distributive objectives. Central government revenue fell to only 3% of GDP (Bird and Wong 2008). After initially falling, inequality was also on the rise, with current estimates suggesting a Gini coefficient upwards of 0.50 in 2010. These tensions between economic decentralization, fiscal constraints and redistributive objectives were manifest in inflationary cycles that peaked in 1985, 1989, and 1993 (Brandt and Zhu 2000).

In the mid-1990s policy makers tackled these issues head on through a series of ambitious reforms that recentralized the fiscal system; restructured the SOE sector; reorganized the financial sector and recapitalized the banks; and with the decision to enter World Trade Organization (WTO) in 2001, exposed the domestic economy to increasing competition and more deeply engaged the international economy. Unlike the earlier reform initiatives however, there were clearly losers here, as most small and medium size SOEs were shut down, and upwards of 50 million workers were furloughed from the state sector.

A number of alternative, and by no means mutually exclusive, explanations have been offered for this sharp break in policy and the ability of the CCP to carry through a set of reforms that would have seemed nearly impossible to carry out earlier. Was it the product of slowly-emerging consensus that the desired long-run outcome of reform was a market economy in which the role of the state was to be radically redefined (Qian 1997)? Alternatively, did it reflect a reconfiguration of political power that accompanied the dying off of key party elders, including Deng Xiaoping, each of whom had their own power base, and in the past was able to block reforms detrimental to the supporters (Naughton 2008)? Or, was it an effort by the CCP to shed support to an increasingly costly constituency in order to sustain economic growth, while providing the Party with the financial and fiscal resources necessary to rebuild patronage and achieve its larger strategic objectives?

Since the mid-to-late 1990s, economic growth has averaged over 10 percent per annum, with China weathering the external shocks from the Asian Financial Crisis (1997-1998), and the most recent World Financial Crisis (2008-2010) fairly well. Central government fiscal revenue increased to nearly 11% of GDP. Inward foreign direct investment (FDI), much of which is focused on the domestic economy, increased to more than \$US 100 billion in 2010, and is now accompanied by significant outward FDI, much of which is in natural resources. Estimates also identify a half or more of GDP growth as the product of productivity growth, coming from rising TFP within sectors, as well as the result of the reallocation of labor and capital to more highly valued sectors (Brandt and Zhu 2012). Upgrading and productivity growth in the manufacturing sector have been especially pronounced, however services, which were more insulated from

WTO-related reforms, have lagged. These achievements have also been accompanied by relaxation on earlier restrictions on geographic mobility, setting in motion probably the largest migration in human history: The recent 2010 population census puts the number of migrants or “floating” population at 150 million (Chan, forthcoming).

Economic dynamism, however, has been accompanied by severe distortions that are easily overlooked when an economy grows as rapidly as China’s, and can be linked to repression in the financial sector, an under-valued exchange rate, poorly defined property rights in land, as well as industrial policies often restricting market access and entry. Since the early 2000s, two clear symptoms of these distortions have been the falling (rising) share of consumption (investment) in GDP, and a significant and persistent current account surplus (Lardy 2012). In 2010, the share of GDP going to investment rose to over fifty percent, probably the highest in the world’s history, and up from 35.3 percent in 2000, while China’s foreign exchange reserves increased to more than \$US 3.6 trillion.¹⁵ The state has been essential to China’s economic transformation and modernization, but other policies (and politics) are also effectively behind a massive redistribution of income between individuals, sectors and regions that is likely serving other political and strategic objectives, and contributing to China’s high and rising level of inequality.

Within the current decade, the rate of growth of the Chinese economy will slow, albeit to levels that are still considerably higher than we observe in advanced countries. This decline will reflect

¹⁵ These distortions are also reflected in nagging differences in the returns to labor and capital across firms, sectors and region, and rising inequality.

the impact of a host of factors, including the narrowing in its technological gap with the West, falling rates of investment, a contraction in the absolute size of its labor force and more rapidly rising wages, as well as the rapid aging of the population. Japan, Korea and Taiwan also experienced reductions in their high rates of growth at a similar point in development, and so it is simply a matter of time. As growth rates fall however, the costs of these distortions will loom even larger, and China's success in moving up the ranks of the middle-income countries and in keeping a lid on social tensions will depend on its ability to deal with the difficult political economy issues that are the source of these distortions. Given China's new role as an engine of growth in the international economy, and its rapid expansion outwards, we can be certain that the consequences from any failure to deal with these issues will not only be felt in China, but will extend past China's borders as well.

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