UNIVERSITY OF
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Master's Degree Thesis

Rising Economic Inequality in China: A Comparison With Japan's Course of Development through Piketty's Inequality Economics

> Economics as a separate science is unrealistic, and misleading if taken as a guide in practice. It is one element—a very important element, it is true—in a wider study, the science of power.
>
> Bertrand Russell (1943: 139), *Power: A New Social Analysis*.

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Chapters

Figures & Tables

Abstract in English

Observers of China's economic development have been stunned by the country's rapid growth rates since the 1990s but also worried about equally rapid increases in economic inequality. Some economists explain rising inequality as the consequence of faster industrial growth in urban areas and to higher income returns longer education. They expect that growth eventually will make China more equal. This study argues against those views by drawing in new works in inequality economists that have been neglected in the research literature. Inequality in China, I argue, is substantially explained by extreme capital concentrations and weak labor organization. China's current inequality levels cannot possibly be reduced by growth alone. To corroborate this argument, I explain how labor lost its independence in pre-reform China and I draw in a historical perspective to the significant institutional changes that were necessary for the decline of extreme inequality in Japan in the mid-20th century.

Abstract in Danish

Den kinesiske økonomis høje vækstrater har tryllebundet mange observatører, mens landets lige så hurtige forøgelse af økonomisk ulighed har vagt bekymring. Nogle økonomer forklarer voksende ulighed som konsekvensen af hurtigere vækst i urbane områder og til ulighed i menneskelig kapital baseret på adgang til højere uddannelse. De forventer at vækst vil være nøglen til at formindske ulighed i fremtiden. Dette studie argumenterer imod de påstande ved at inddrage nye værker i ulighedsøkonomi som hidtil har været dårligt repræsenteret i kinaforskning. Ulighed, argumenterer jeg, har sin tungeste kvalitative vægt i ekstreme koncentrationer af kapital. Disse klynger af ressourcer kan umuligt reduceres af vækst. Til at underbygge dette argument bruger jeg Piketty's nye statistiske data og jeg forklarer hvordan arbejderbevægelsen mistede sin uafhængighed i Kina før reformperioden. Til slut drager jeg et historisk perspektiv til udlignelsen af ekstrem ulighed i Japan omkring Anden Verdenskrig for at vise hvilke omfattende institutionelle forandringer der før i tiden har mindsket skellene i ekstremt ulige udviklingsøkonomier.

Introduction

Inequality used to be a generally marginalized subject in economics. In the prosperous post-World War 2 decades, Japan, Europe, and America saw falling top income shares and middle class formation. As reconstruction proceeded, high growth was accompanied by expanding public economies that supported institutions based on the social rights of longer, accessible education, health care, and universal pensions. Women enrolled in schools and started working outside the home. Unions proliferated and forged alliances with parliamentary parties. Wholly new levels of material living standards became reality. Growth was the core interest of economists. It appeared that progressive socio-economic developments would leave behind the old world order of the Great Depression, powerful corporate conglomerates, inherited wealth, and class conflicts. Inequality could be put to rest as a relatively unsubstantial dimension of economics.

Interest in inequality has not been reawakened by careful observations by economists. Rather, as global recessions, political instability, and global expansion of corporations and financial wealth started impacting societies, a series of problems has forced researchers to face the unavoidable question whether the world economy is on the right track.

Beginning in the 1980s globalization, growth rates experienced in the "Golden Age" (1950-1973) declined from an average of 3-4% to 1-2%. Japan, a later developer, had achieved then unimaginable 8% rates which quickly vanished. Growth in developing countries, which in theory can achieve higher catch-up rates, also have seen a decline, except in China which has experienced roughly 8% growth for three decades (Chang 2002: 130-131). Income growth ceased to be egalitarian. Milanovic (2016: 19) studied "high globalization" from the Fall of the Berlin Wall to the 2008 global economic recession. He was forced to conclude that the world's 1% highest income group had taken by far the majority of global income growth while the bottom half of the income scale in the developed world had lived with "the absence of growth in real income over twenty years."

Guy Standing's (2011) *The Precariat: The New Dangerous Class* proposed that a global market economy is being built which is forcing younger generations consisting of both university graduates and the post-war labor class's children into a vast global precariat struggling to obtain their parent's living standards while holding fewer and fewer rights.

Joseph Stiglitz, an economist dedicated to inequality, became a Nobel laureate. His (2012) *The Price of Inequality* explains the vicious cycles constituting the forces behind rapidly rising inequality in the US: *Social mobility* is vanishing because of high university tuition fees that exclude children of lower class families. *Economic crises*—absent in the post-war decades (Reinhart & Rogoff 2008)—cause unemployment for numerous citizens who live paycheck to paycheck, all while states muster tremendous financial resources in support of finance banks by cutting social programs. *Radicalization* grows as political institutions can no longer garner loyalty among citizens while privatization of media has enabled the 1% to gain "the upper hand" in shaping widespread public beliefs:

> They have the resources to buy and control critical media outlets, and some of them are wiling to do so at a loss: it's an investment in maintaining their economic position. Like the political investments of the banks, these investments may yield far higher *private* returns than ordinary instruments--if one includes impacts on the political process. (2011: 129)

Some aspects of these facts are very vivid to most citizens in their everyday lives. They are resulting in shrinking middle classes (UN 2016: 165). The unfairness and injustices have caused an eruption of distrust and dissatisfaction around the world.

As Milanovic and Stiglitz argue, the rise of the global 1% of income and wealth arguably is intertwined with the stagnation and insecurity of the majority. They appear at the top of institutional hierarchies as corporate stewards of multinational corporations with thousands of employees, as owners of vast financial portfolios, and as donors and supporters of politicians who are willing to serve their interests. Inequality economics is increasingly seen as a primary analytical dimension of institutions and social hierarchies rather than as a marginalized subject related to growth.

The most widely discussed inequality economist has been Thomas Piketty. His (2014) *Capital in the Twenty-First Century* demonstrated for the first time in long, graphical time series how the 1% dominated economies before World War 2, obtaining 20-25% of total national income and owning on the order of 80% of all wealth. Their preponderance in the "old world of capitalism" as dynasties was built on preserving wealth over generations, acting as corporate managers, as property owners, and as the primary opposition to labor rights. These economic elites are reemerging and are at the center of rising inequality today. The unified statistics that became available to Piketty allowed him to demonstrate that growth rates, a measure of the combined productivity, value-creation, and innovation of a society, rarely exceeds the rate of return on capital which is a resource increasingly unequally distributed. America today has returned to nearly the same scales of extreme economic inequality found a century ago in the 1920s. As a United Nations Special Rapporteur stated in 2017, the US is becoming the "world champion of extreme inequality" and as "one of the world's richest, most powerful and technologically innovative countries" neither "its wealth nor its power nor its technology is being harnessed to address the situation in which 40 million people continue to live in poverty" (UN 2017).

The second country of extreme inequality of the period is China. In spite of its unrivalled 8% annual growth rates, several dimensions of its economic structure are increasingly comparable to the US today or Japan and Europe at the eve of World War 2. Sun (2014: 7), a political scientist favored by the party, explains that China's problems are caused by stalled reforms that have left power institutions to distort markets to the advantage of elites: Since the 1990s, China's

> reforms entered a condition of malformation. Political system reforms have been shelved completely, going so far that the favor towards government and lawful rule [政治和法治] are showing signs becoming discredited. Only economic reforms, like a lone soldier, march forward, and because they lack balance of power, lack the transparency of public discussion, lack the common people's ability and right to protect their own interests, marketization and privatization reforms quickly turn into a process of robbing the wealth of the public and society.

This study in rising inequality in China uses a comparative historical perspective on inequality and development to investigate why divides in economic resources are widening and to compare it to Japan's course of development. It has the following three aims: (1) to refute theories about development that builds on hypotheses that growth solves inequality; (2) to unfold the empirical linkages between different dimensions of economic inequality, institutional hierarchies, and egalitarian development in general; and (3) to compare inequality in China and Japan's different courses of development.

Part 1: Theory

1.1 General Questions in the Field of Inequality Economics

We have now introduced several questions of considerable complexity: is there a solid relationship between growth and equality forming a robust development theory? Is China following a reasonable development path comparable to Japan or Europe's which ran into extreme inequality in the mid-20th century but then transitioned to more equal societies? Is China's high inequality caused by globalization or its communist past which will prevent a society of better equity to emerge?

Inequality has numerous aspects and has been investigated from various perspectives stemming from unique research questions and particular working hypotheses. At a general level, these approaches to *inequality* have ranged from a primary focus on *economic inequality* (income classes) to inequalities in *power* (authoritarian rule vs. organized civil society) or *social hierarchies* (such as women's position in the family and labor market). A focus on economic inequality takes advantage of increasingly sophisticated statistical data on how income and wealth is divided among groups, while the focus on power inequalities and social hierarchies runs into greater difficulties in quantitative precision. Nevertheless, while the impressive graphical presentations of how income and wealth inequalities have evolved through time suggest major shifts in societies and economies, we must assume that these correspond to changes in social organization, human behavior, historical accidents, and institutions, broadly speaking. Explaining the crucial nexus and links between economics, politics, and social organization is difficult but unavoidable, as Atkinson's (1983: 220) classic textbook *The Economics of Inequality* concludes in its survey of competing theories:

> The theories all emphasize aspects of the real world that are clearly important – the role of technology, the contribution of accumulation of growth, the strength of unions and employers, and the interests of workers and capitalists—but none by itself is probably fully adequate as an explanation of the observed pattern.

As a way of introduction, we will take a cursory glance at the problems that form logical connections at the heart of inequality economics:

First,

(1) Is equality sure to follow from economic growth?

Is there a clear relationship between economic growth and inequality? Is it enough to relate mathematically growth and equality quantities to derive a valid conclusion? Is it always the case that when national growth rates grind through the decades, these fruits of production will fall into a reasonably equal distribution? Or will this income tend to accrue into heavily concentrated clusters such as financial conglomerates, corporations, and wealthy dynasties?

Second,

(2) Does growth yield increasing inequality and cause social unrest, rebellion, or even revolution?

To elaborate, if a society experiences rising inequality, is growth possibly based on exploitative mechanisms and injustices that people will not accept as the fundamental workings of their society in the long run? Is the rise of the 1% bound to the decline of labor? Are societies with an extremely unequal division of economic resources also divided into a related system of social classes such as a hereditary aristocracy possessing vast estates and a working class without possessions, each living in different cultural worlds?

Does circulation take place between these classes, that is, is there upward social mobility? Or are economic means so important in the process of social mobility that rising up in society excludes those without affluent parents?

Third, suppose that there is neither an exclusively negative or positive empirical dynamic between growth and inequality, meaning that societies can achieve both undiminished growth rates and simultaneously very different levels of economic inequality, which institutions enforce these specific constellation?

(3) Which institutions exacerbate or ameliorate inequality, and which give rise to inequality or support equality?

Fourth, these questions are also discussed as subjects of moral philosophy. If we for a moment abandon the growth-equality links and what this means for the well-being of a society, we could ask how egalitarian a just society would be?

(4) Is economic equality somehow anchored in justice and is inequality immoral?

This branch of investigation goes a long way back from the present through interesting paths to the past. Plato of Athens' famous edifice, proposed in the 4th century BCE, of a state in perfect justice and harmony (and extreme repression of human freedom) in his eyes were to be governed by guardians wielding absolute power (Popper 2013/1945; Brisson's 1998), but in return for power they had to sacrifice all earthly possessions and had to be indoctrinated with mythologies about "divine souls" as moral substitutes for the material wealth held by Greek oligarchs.

> none of [the guardians are] to have acquired any personal property which is not absolutely necessary. Then none must have any dwelling or storehouse of any sort to which there is not free access to anyone who wishes to enter. [...] they will not have a surplus or shortfall at the end of the year. [...] We shall tell them that they have divine gold and silver from the gods for ever in their souls, and that they have no need of human gold and silver in addition. (Plato 2013a: 339)

More recently, Rawls's (2003) *Justice as Fairness* has been influential in discussing the role of equal opportunity in society. Some scholars still tend to believe that inequality economics is an exercise in inventing "some subjective standard of what is fair" (Gilpin 2001: 66), but inequality research is primarily a descriptive endeavor aiming at discovering the "empirical linkages" (Sen 1999: 38) that tie together economic classes, institutions, and development. Modern inequality economists, in describing how wealth is increasingly concentrated at the top 1% of the world's wealth hierarchy, is actually making sober statements derived from data collections meticulously gathered through decades. They are not making moral judgments or political statements any stronger than those who choose to ignore those facts.

All research in inequality economics today has logical connections to these central questions, and Atkinson is probably right that the best explanations tie together a variety of these insights into a solid conclusion. Which dimensions are more relevant will depend on how a given society is organized. We will now turn to the first major theoretical question relevant to understanding rising inequality in China: the relationship between development and growth on one side and inequality on the other.

1.2 Inequality & Prediction: Marx's Fallacies

Marx (2008/1867) held one of the most critical theories of political economy and growth. He asserted that

Economic growth is accompanied by a vicious cycle of rising inequality leading to immiseration and rebellion.

To observers today, this statement is obviously false. No rich countries whose industrialization and modern growth began in Marx's life have managed to keep the majority of its workforce in poverty and destitution. Objectively, living standards, life expectancy, and years in education have risen dramatically for a century. Governments abandon absolute measure of poverty (based on the cost of necessary life nutrition, for instance) in favor of a poverty line corresponding to 50% of a nation's median income (Atkinson 1983: chapter 10). Instead, discussions center on the problems of income inequality, on how quality of life standards rise, and on whether extreme levels of inequality causes unrest. For all these topics, Marx is relevant. Criticism of Marx are mainly directed against his hard theoretical convictions.

Marx wrote within a theoretical framework of historical inevitability, as he himself (2008/1867: 4) introduces in *Capital*:

> it is not a question of the higher or lower degree of development of the social antagonisms that result from the natural laws of capitalist production. It is a question of these laws themselves, of these tendencies working with iron necessity towards inevitable results. The country that is more developed industrially only shows, to the less developed, the image of its own future.

The most careful critique of Marx's methodology of historical laws, future prediction, and inevitable causation is found in Popper's (2013/1945) *The Open Society and Its Enemies*. He argues that Marx misunderstood the scientific method of the European Enlightenment's natural philosophy which had successfully led to the discovery of the "laws" of gravity. These mechanical laws of the universe are actually not known with any certainty. We do not understand their causal source or even most of their material/physical qualities (Chomsky 2016). In fact, we cannot even predict the course of the planets in our solar system's with complete certainty, because any astronomical event, for instance a sun exploding, may interfere, or simply because their matter contains unknown physical laws. Popper's (2013/1945: 224) very long discussion of Marx's philosophical tradition presents the conclusion that "science can predict the future only if the future is predetermined—if, as it were, the future is present in the past, telescoped in it" and this observation led Marx "to adhere to the false belief that a rigidly scientific method must be based on a rigid determinism."

Marx's lack of theoretical modesty was also pointed out by philosopher Bertrand Russell (2008/1918: 23) (1950 Nobel laureate in literature):

> Marx's magnum opus, "Capital," added bulk and substance to the theses of the Communist Manifesto. It contributed the theory of surplus value, which professed to explain the actual mechanism of capitalist exploitation. This doctrine is very complicated and is scarcely tenable as a contribution to pure theory.

Atkinson's (1983: 219) critique of Marx is simply that there is no way to determine "labor value" without relating it to market prices of food and housing. There is therefore no way to demonstrate how harsh exploitation of labor is, only how much they spend of their livelihood on basic necessities, and the "surplus value" expropriated by the capitalist is therefore equally uncertain.

> The distribution of income depends on the rate of exploitation, but there is no straightforward way in which this concept can be related to actual changes in money profits and wages, since the rate of exploitation is defined in terms of "labour values" and not in terms of prices. Surplus value and profits cannot be equated [...].

Russell (2008/1918: 23) concludes about Marx's determinism that it is, in the end, a fantasy only Marx himself conceived:

> It is rather to be viewed as a translation into abstract terms of the hatred with which Marx regarded the system that coins wealth out of human lives, and it is in this spirit, rather than in that of disinterested analysis, that it has been read by its admirers.

Another Nobel laureate, this time in biology, Monod, supports Popper and Russell's criticism against Marx. Monod emphasizes that Marx, first, mistook natural philosophy to be a science of absolute certainty, then he tried to formulate laws of economics for human society similar to the laws of nature, thereby animating economics with destiny-like principles. His ideas were therefore a new form of "animism," that is, humans animating the world by inventing divinities and destiny, building on

> the hypothesis that natural phenomena can and must be explained in the same manner, by the same "laws," as subjective human activity, conscious and purposive. Primitive animism formulated this hypothesis with complete candor, frankness, and precision, populating nature with gracious or awesome myths and myth-figures which have for centuries nourished art and poetry. (1971: 30-31)

We may protest that this methodological layer of Marx's work is irrelevant to his social criticism. But there is reason to think that Marx was dangerously committed to his framework of prophesy and prediction. According to Said's (2003) *Orientalism*, Marx seemed so unyieldingly attached to this idea of inevitability that he became a vigorous *supporter* of capitalist imperialism in Asia. Once the leading industrial economy in the world, Britain, had conquered and enslaved Asia, it would act, Marx thought, as 'the unconscious tool of history' bringing about socialist revolt. Said (2003: 153) quotes Marx:

> England, it is true, in causing a social revolution in Hindustan was actuated only by the vilest interests, and was stupid in the manner of enforcing them. But that is not the question. The question is, can mankind fulfil its destiny without a fundamental revolution in the social state of Asia? If not, whatever may be the crimes of England she was the unconscious tool of history in bringing about that revolution.

Said comments that 'In article after article [Marx] returned with increasing conviction to the idea that even in destroying Asia, Britain was making possible there a real social revolution'.

1.3 Growth & Inequality: Kuznets's Virtuous Hypotheses

In the post-World War 2 decades in Europe, a view nearly opposite to Marx's belief in a vicious cycle of growth and inequality was proposed by Kuznets (1955). Kuznets proposed a group of hypotheses to explain why inequality had declined (primarily in Britain and America) since its peak in World War 1. These hypotheses support the idea that

Economic growth is accompanied by a virtuous cycle of development leading to equality.

Kuznets was far more modest than Marx in the explanatory scope of his virtuous hypotheses. His (1955: 26) paper repeatedly draws attention to its weak empirical and statistical data:

> I am acutely conscious of the meagerness of reliable information presented. The paper is perhaps 5 per cent empirical information and 95 per cent speculation, some of it possibly tainted by wishful thinking. The excuse for building an elaborate structure on such a shaky foundation is a deep interest in the subject [...].

How exactly did Kuznets argue for the virtuous relationship between growth and equality? First he (1955: 4) noted statistical evidence that since World War 2, in America, the share of national income going to the top 5% highest income group had declined markedly from 55% to 44%. In Britain, the top 5% share fell from 43% in 1910 to 24% in 1947. To Kuznets, "development" was primarily a matter of industrial growth in urban sectors sector and subsequent migration from predominantly agricultural regions. The emergence of unprecedented income growth rates combined with a falling share of the economy taken by high income groups logically meant that equality was being strengthened.

What explanation lay behind this remarkably evolution toward equality? Several forces of *inequality* had to be overwhelmed by stronger forces of equality. Societies where at the outset highly unequal, with only the 10% wealthiest owning capital (or "savings"): "only the upper-income groups save; the total savings of groups below the top decile are fairly close to zero" (1955: 8). If 90% of society had no significant property or enough income to save,

> Other conditions being equal, the cumulative effect of such inequality in savings would be the concentration of an *increasing* proportion of income-yielding assets in the hands of the upper groups—a basis for larger income shares of these groups and their descendants.

Which *forces of equality* outweighed this concentration of capital and income? Kuznets (1955: 9) points to (1) *legislative interference*: inheritance taxes on family fortunes; capital levies; government-induced inflation; restrictions imposed on yield from property; artificially low interest rates on loans, which protected public bonds sold to economic elites from growing to quickly; and new social policy measures owing to the strengthened labor movement.

(2) The force of faster population growth meant that the category of the top 1% was now twice as large compared to a situation without population growth and where only the first-born descendant inherited wealth.

(3) While a large part of the top 10% remained old families, the emergence of new industries necessitated that they actively obtain ownership over new sectors to remain holders of great wealth, but such a "*long unbroken* sequence of connection with rising industries and hence with major sources of continued large property incomes is exceedingly rare [...]the more rapid growth the greater the impact will be" (1955: 10-11).

(4) As industrial sectors developed, they tended to create need for new skills, supporting the position of professionals in engineering, building, and management.

Policies limiting capital gains and funding social policies, population growth, inability of dynasties to preserve their properties, and professional labor, he concluded, had outdone inheritance of accumulated property. These he took to be intrinsic characteristics of growth economies:

> One can then say, in general, that the basic factor militating against the rise in upper-income shares that would be produced by the cumulative effects of concentration of savings, is the dynamism of a growing and free economic society.

It is extremely important to understand that growth is *not* equated to *markets*. His theory is that industrial growth rates of 1-2% (this was the age before the Japanese, Korean, and Chinese rapid catch-up growth had ever occurred) reduce inequality, not that markets reduce inequality. Growth rates are relatively easy to evidenced in statistics, but to what extent a society is dominated by markets requires a totally different analysis (making their role very easy to exaggerate for researchers with no education in history).

In trying to connect these dynamisms to the nature of a "free economic society," Kuznets arguably commits a series of grave fallacies. Based on Piketty's (2014) conclusions, we can raise the following charges against Kuznets:

(1') Kuznets highly underestimates the role of political intervention: more precise data evidences that the observed reductions in inequality are closely connected to specific events in single years, namely institutional innovations implemented under world war exigencies, rather than to a long process of skilled labor entering growing industries gradually coming to overshadow inheritance.

(2') Fast population growth is not a feature of market societies and it is not a lasting process in modern economies.

(3') Normal national growth rates do not generally exceed the growth of the 1%'s capital holdings, and above-normal economic growth rates are mostly impossible to induce artificially by governments, except in very rare cases such as periods succeeding low growth (after depressions or wars, especially) or one-time catch-up periods.

Both (2') and (3') cannot be produced by intentional policies or they would require immense state intervention into the lives of individuals.

(4') Rising incomes of skilled labor was arguably the result of unions using strengthened leverage over capitalists rather than the amount of available labor.

Wealth before the 1950s was still significantly agricultural property whereas today wealth has been transformed into stocks in major corporations, central banks, urban property, and machines. It is not obviously reasonable to believe that in today's developed economies, those corporations tied to highly sophisticated technologies, national financial systems, or modern housing will inevitably decline as under the structural transformations that agricultural wealth did in earlier development phases. They may, possibly, be able to preserve their ownership for centuries just as landlord families did before industrialization. This is in fact how the 1% grows its share of income, as Piketty (2014: 571) concludes: "wealth accumulated in the past grows more rapidly than output and wages."

Therefore, without social policies, lacking high population growth, without rapid growth rates, without strong unions, and without major technological innovations to overthrow dynasties, preciously little of Kuznets's theory arguably remains relevant. Some elements like growth in income and population, (2') and (3'), may theoretically reduce inequality but cannot be artificially created.

Kuznets proceeds in his paper to describe a mathematical economic model, an "elaborate structure," of how industrialization leads to the movement of labor from a relatively equal agricultural sector to an initially highly unequal industrial sector, widening the gap between rich and poor "when the urban population was being swelled, and fairly rapidly, by immigrants." Afterwards, "a variety of forces converged to bolster the economic position of the lower-income groups within the urban population" (1955: 16-17).

Both Kuznets' interpretation of facts and his "95% speculations"-based explanations basically gravitate around his wish to invent a set of logical assumptions which, *if* historically true or *if* implemented by governments, would tie equality almost automatically to growth within *one development paradigm*, making *growth and socially equal development nearly undistinguishable*. By putting growth at its center, it is arguably "captive to the liberal myth that the modern industrial revolution occurred autonomously from state intervention and, indeed, required its absence" (Esping-Andersen 1990: 347).

UN advisor and development economist Chang (2002: 6-13) has protested with similar criticisms that even economics which refer to historical experiences "tend to be full of myths that support the orthodox version of the history of economic policy." The "currently dominant Neoclassical approach based on abstract and deductive methods" has become "peculiarly ahistorical." Instead he proposes a methodology that "involves searching for persistent historical patterns, constructing theories to explain them, and applying these theories to contemporary problems, while taking into account changes in technological, institutional and political circumstances." Piketty (2014: 32) joins them, stating bluntly that

> the discipline of economics has yet to get over its childish passion for mathematics and for purely theoretical and often highly ideological speculation, at the expense of historical research and collaboration with the other social sciences.

1.4 Piketty & the Revolution in Inequality Data: Breaking the Virtuous Cycle

Piketty's 700-page seminal work on economic inequality *Capital in the Twenty-First Century* became a global best-seller when published in 2014. It was widely discussed in media, by researchers, and in public. Among its numerous significant dimensions, it contains three crucial contributions to inequality economics: *historical evidence*, a new *methodology*, and a *theoretical model*.

He built on the statistical revolution present in the worldwide collaboration of economic data collection named the World Income and Wealth Database (WID), which is just now nearing completion (Alvaredo et al. 2017). Compared to OECD's Maddison's (2001; 2003) collection of production and population growth, the WID takes inequality as its core concept around which all data is sorted. It is a natural development as income inequality simply is a more sophisticated structural analysis of income growth, but it also offers a brand new innovation in its collection of *wealth* or *capital*.

Piketty (2014) offers a logical and comprehensive interpretation of these data. The increasing coverage and detailed information allowed him to establish a social science *methodology* which provides a series of graphs that depicts how economic inequalities are bound to each other and follow a continuous rise, as a UN report (2016: 288) describes:

> The strength of the new style of doing social science depends on repeat visualizations with a recurring theme, each linked to an overarching story that effectively captures the central argument of the author, to deploy concepts with wide intellectual resonance and political implications.

Let us unfold these three contributions in greater detail.

1.5 Piketty's History of Inequality

Piketty's first conclusion on his long historical data series can be summed up in the following statement:

Economic inequality today is returning to the extreme levels of the early 20th century.

Consider the evidence depicted in Figure 1.A below. The graph shows the percentage share of total national income which the top 1% income group received between 1885-2010. The data presents four major economies during the period: the first three—the US, France, and Japan—were already industrializing by 1900, achieving annual growth rates of at least 1.5%. For the fourth country, China, there is no consistent data series stretching that far back, in part due to China's later achievement of independence and national institution-building in the 1950s.

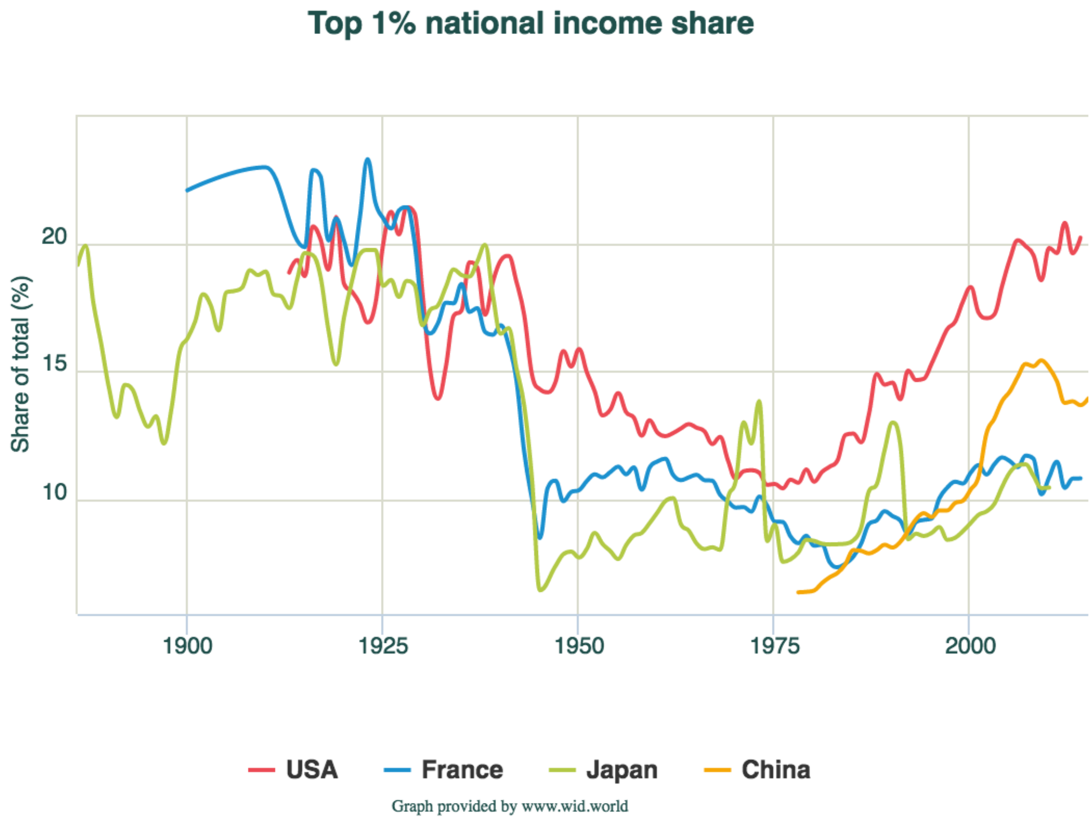

Figure 1.A: Top 1% incomes in the US, France, Japan, and China 1885-2010.

It has been common in the major economies of America, Europe, and Asia that income has been extremely concentrated in the top 1%. Only during a small window of about two decades after World War 2 has income inequality been low. In the US today, income inequality has returned to its highest point a century ago in 1920. Source: WID (2017).

We observe that the top 1%, a very small group in society, received around 20% of national income in 1920 in earlier developers. Income inequality had soared for decades in parallel with urbanization to reach these levels, creating a gab between labor migrating from the countryside and capitalists who owned the new factory systems. Japan, a relatively late developer whose industrial growth rates started around 1886 (Minami 1994), show "all the signs that in terms of both income structure and income inequality, Japan was indeed part of the same 'old world' as Europe" (Piketty 2014: 322). Here, the 1% took 20% of national income in 1915. The first substantial reduction in income inequality in America and France occurred

1929-1930 when the Great Depression set in, leading to both economic instability and new policies. These events had a lasting impact, but the next decline connected to World War 2 was just as dramatic. In Japan, starting in the exact year 1938, elite incomes fell from 20% to about 11% in 1944, and further down to 6% in 1945. This turbulent period saw a radical transformation of institutions because of government policies to prepare for war with the US, because of the collapse of the global trade and financial system, and because of new programs to ensure domestic stability (Moriguchi & Saez 2010).

Japan and France suffered defeat and occupation in World War 2. Destruction impacted them far worse than the US which emerged victorious. The US had not been subjected to invasion or to bombardment of industrial centers, or any other kind of prolonged destruction. Still, the 1% in the US felt their income share fall every year between the Great Depression in 1929 until 1976. They experienced a precipitous fall in 1929 before which their incomes had reached a towering 23.9% right before The Great Depression began. The depression caused a large but temporary fall after which their position was reconstituted at 19.3% again by 1936. The Great Depression alone, therefore, did not cause the decline in inequality. Only in the following year did a lasting decline of top incomes begin. This would last for forty years. The US was both a pioneer in implementing progressive taxation and changing labor market policies, in addition to being a quite egalitarian society until the 1980s. This development undoubtedly began with reforms to pave the way for US to enter World War 2 in both Europe and Asia, fuelled by the vivid crises and increasingly invigorated labor movement of the 1930s (Piketty 2014; Moriguchi 2003).

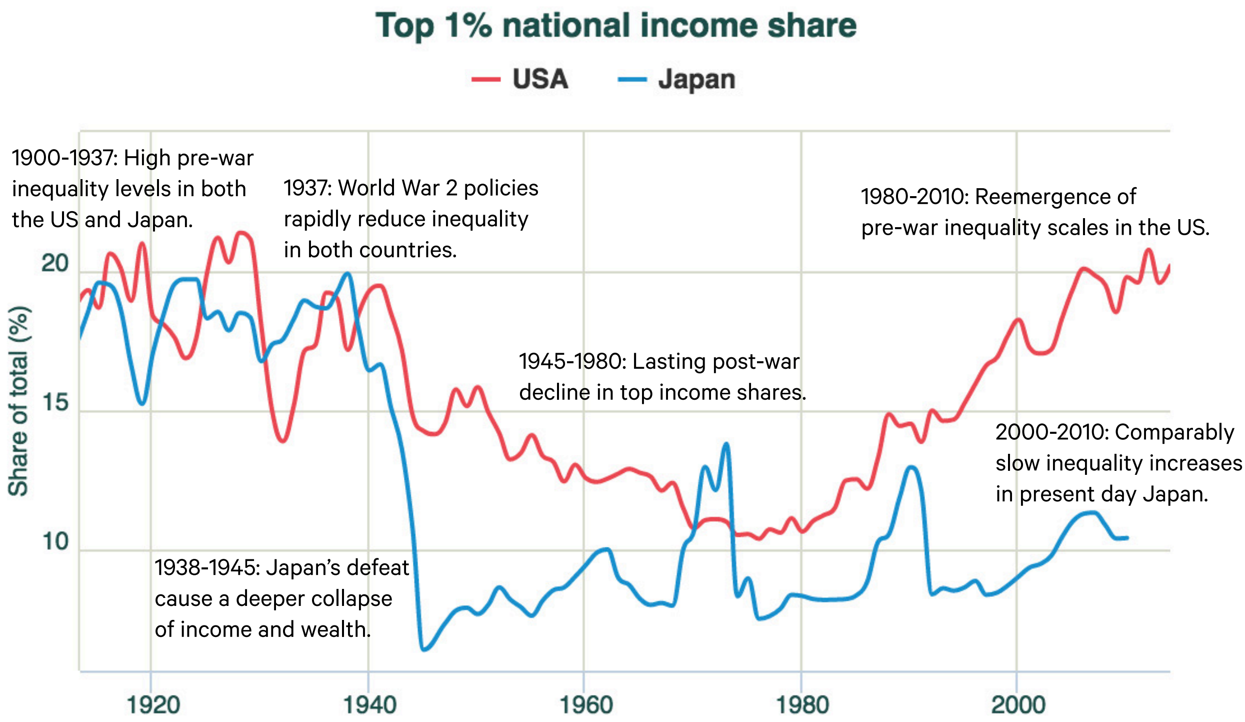

Figure 1.B: Comparing the evolutions of the 1% income share in the US and Japan, 1915-2015.

Source: WID (2017) and author's modifications.

The evidence in Figure 1.B shows that inequality reductions have historically been carried by policy intervention and institutional innovation. In the 1940s, labor movements in the US and Japan had grown to unprecedented organizational strength and reached into both civil society and parliaments. The Great Depression provided vivid evidence for the dysfunctions of the old economic order, and reforms to reduce inequality and raise funding for welfare institutions—pioneered by Germany and Denmark's citizen pensions around 1890 (Dillon 2015: chapter 1) were regarded as vital political innovations.

But the outbreak of war provided a social environment of crisis, uncertainty, and mobilization while bureaucratic elites were faced with the tasks of planning for war. Combined, the late 1930s became the key years that made possible imposing the first progressive tax policies on capitalist elites. Japan's stronger inequality reduction in the 1940s was only in part due to a deeper collapse of its economy during its defeat, US bombing runs on its urban centers, and the subsequent occupation. The US remained completely unscathed but still saw a long-lasting inequality decline for half a century because of policy initiatives. This trend was not reversed in the US until the 1980s when regressive tax policies were first pushed through in the beginning of the "neoliberal period" which gradually allowed the 1% to return to dominance. In Japan, in the past three decades, the rise of the 1% is far more modest, if significant. It started around 1998 and has now risen from 8.4% to 10.4% in 2009 (in 1971 and 1990, Japan experienced two bubbles where top income shares more than doubled and then imploded within a couple of years).

These diverging patterns in the US, Europe, and Japan can only be explained using a complex methodology that takes in account recessions, wartime destruction, innovations in legislation, changes in tax policy, growth rates, and concentration of capital ownership, with "powerful forces pushing alternately in the direction of rising or shrinking inequality. Which one dominates depends on the institutions that societies choose to adopt" (Piketty & Saez 2014: 842).

Returning to Figure 1.A, we observe that, since 1978, China's top 1% income share soared from 6.3% to an astounding 15.1% in 2010. China's "reform era," then, portrays characteristics of the global 1%'s rise to dominance. In this dimension of inequality, China surpasses Japan and Europe's scales in the post-war half century, although the rise has not yet reached the same inequality scales as the US. Measured on this parameter, China's 1%'s share has increased by a record 136% owing to its lower starting point. In the USA, the increase was 77% and in Europe and Japan only about 25%.

1%'s Share of National Income (%)

	1978	2010	Rise (%)
Japan	8.4	10.4	24%
France	8.6	10.8	26%
China	6.4	15.1	136%
USA	11.2	19.8	77%

Table 1.C: Increases in top 1% income shares.

In sum, examining the highest peak of the income hierarchy in the major developed economies, we conclude that it was not the dynamics of industrial growth, the gradual rise of skilled labor over decades, or even population growth which strongly affected income inequality. It was the policy initiatives and destructions of the World War 2 participants that had enduring consequences for the post-war period. High levels of inequality have been the common state of society in the rich countries around 1900 and 2000, with only an isolated period of low inequality in the mid-20th century.

The evidence of the 1%'s income shares presented so far is not enough to conclude that the rest of society did not experience any income progress at all, as Marx's immiseration theory predicted. It also invalid to argue that population and economic growth did not reduce inequality in some measure, or that the families constituting the 1% did not circulate and fall out of this group. The primary conclusion for now is that *legal interference, especially taxation on top incomes and capital, as well as social policies in specific years which were responses to dramatic shifts in both domestic and world economic environments led to a lasting decline in top incomes and therefore in inequality*.

Economic inequality, therefore, must be anchored in institutional and policy analysis that takes these forces into consideration:

The level of economic inequality in a society is studied by accounting for structural evolutions in income and wealth received by specific groups and is explained by tying them to institutional and historical changes.

1.6 Piketty's "Fundamental Law" of Capitalism

The achievement of accounting for wealth/capital carried out by the WID researchers allowed Piketty to investigate the relationship between capital and income.

To Kuznets (1955: 8) it was common knowledge that "savings" and "property"—wealth or capital in general—was highly concentrated among the top 10% income group: "an *increasing* proportion of income-yielding assets in the hands of the upper groups" meant that descendants of top income receivers would continuously increase their hold on resources.

Ownership of wealth has close ties to income inequality because of the institutional arrangements wealth is constituted by. Ownership of agricultural property allows a landlord to elicit rents from tenant farmers just as a state taxes agricultural products. Holding modern housing property in urban centers similarly confers the right to collect rents paid from people's incomes. Managing wealth portfolios allows one to receive income from companies with working employees and owning state obligations allows one to demand transfers from the state budget to personal fortunes. As Atkinson concludes, capital ownership creates link between income, control, and the state which "are far from straightforward" and is often "vested in executives, civil servants, and politicians" (Atkinson 1983: 37).

How has hierarchies of wealth/capital historically evolved compared to the 1%'s national income share was the next question Piketty treated. We will use Japan as an example (Figure 1.D) but Europe and the US were comparable. Wealth concentrations in pre-war Japan were among the deepest in modern history. The 1%'s holdings grew from around 50 million yen in 1905 until it hovered at 200 million in the 1920s. We note that the top 5-1% held substantial wealth at around 20 million, but even they did not participate in the major structural changes of capitalism.

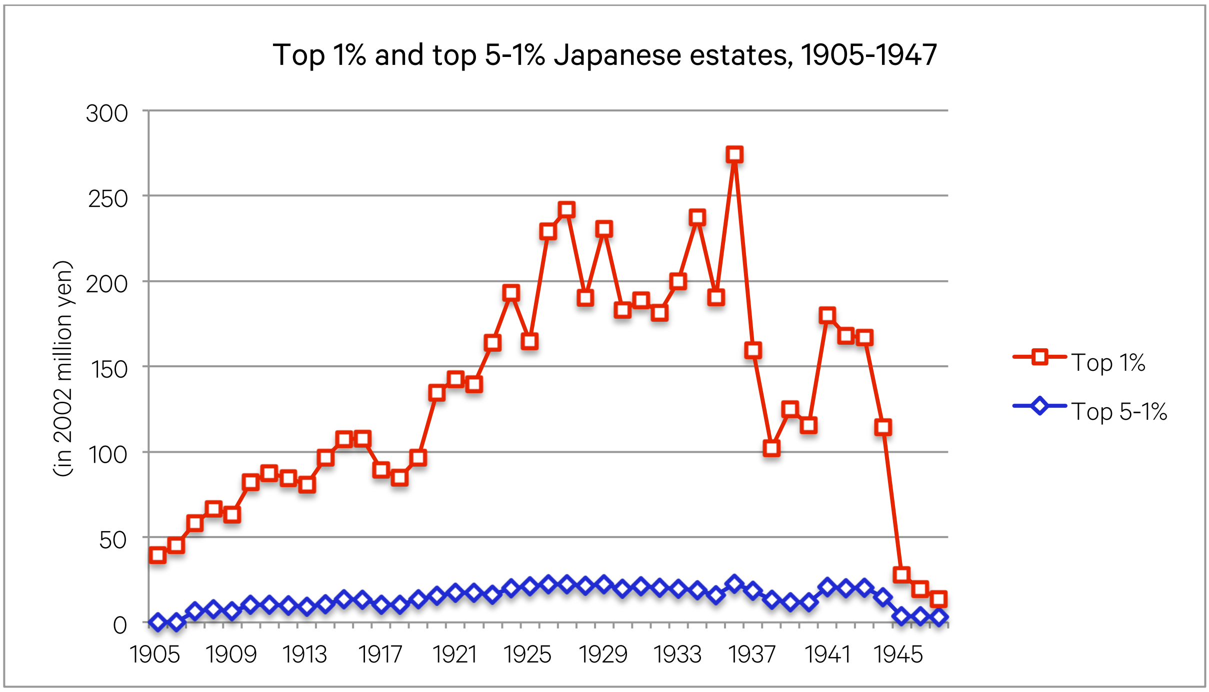

Figure 1.D: The top 1% and top 10% wealth share in Japan, 1905-1947.

Wealth inequality remained anchored primarily in the property of Japan's 1%. Their fortunes surged upwards especially after World War 1 and did not decline until World War 2 policies were implemented in 1937.

Source: Moriguchi & Saez (2010, pp. 147-8).

Not only is the distribution of capital immensely unequal, it also accumulates until very high levels. According to an Imperial Cabinet Bureau of Statistics study in 1930, total wealth amounted to as much as ten times aggregate national income (Lockwood 1968: 238), meaning the 1% owned nearly as much capital as the entire Japanese economy produced in 9-10 years. This accumulation was destroyed, redistributed, and reduced by inflation in the mid-century period of turbulence and open conflict.

How can we meaningfully relate wealth to growth to determine its role in rising inequality? In Piketty's (2014) chapter Growth: Illusions and Realities, a survey of growth rates across the world yields average rates of around 1.5%-2% and a population growth rate of 1%. Capital, however, grows much, much faster at 5%, often leaning towards higher rates of 10% for the upper fractions of the 1% largest fortunes. Observe Figure 1.E. Before World War 2, the industrial economies of America, Germany, and Japan grew at rates between 1-2% for over a century. In the post-war years of the 1950s, we see that US growth rose only to a little above 2%. In those same decades, Japan and Germany experienced the fastest income growth in world history, with Japan reaching 8% and Germany 5%.

It is possible as a matter of pure arithmetic to set up mathematical assumptions for a relationship between economic inequality (for example, the 1%'s declining share or the Gini coefficient) and economic growth rates in certain years. In the post-war years, this relationship would be strong in Asia and Europe. But such an assumed relationship would, unfortunately, be misleading. Inequality's fall in the US was equally dramatic, but growth only rose slightly. The truer explanation of rapid growth is that Japan and Germany had already begun industrializing leading up the world war but remained at much lower levels of national income than the US. Moreover, they were subjected to heavy destruction in the 1940s, which gave room for large national reconstruction projects. Population growth was also high in these years, one of the strongest factors in overall economic growth. Although defeated in World War 2, they were chosen for cooperation with the US during the Cold War. The US, having emerged unscathed with an economy stronger than ever before, and with a bureaucracy deeply committed to supporting its new Cold War allies with massive amounts of aid, favorable exports, and technology transfers, the stage was set for very strong "catch up" effects in these two economies. The rapid growth effects, however, disappeared in the 1980s when Germany and Japan caught up with the income and productivity levels of the US.

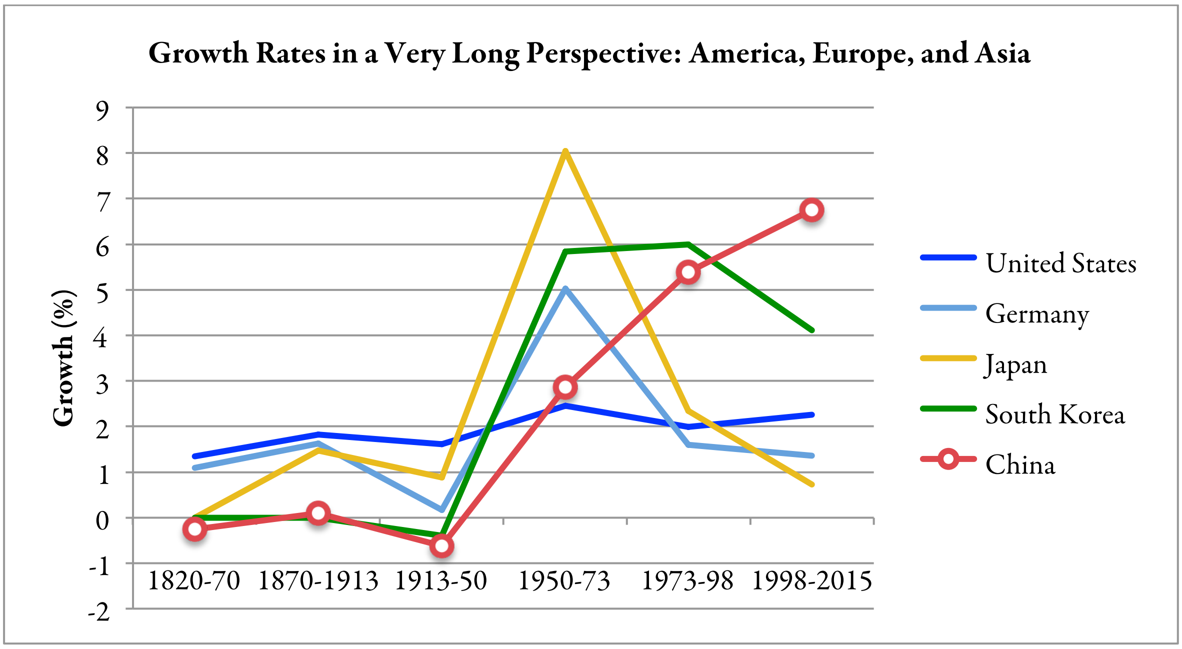

Figure 1.E: World growth rates in the long run.

In the past two centuries, growth rates have only surpassed 2% in the decades after first declining because of the Great Depression and World War 2. Europe and Asia's short periods of higher growth are brief intermissions.
Sources: All countries 1820-1973 (Maddison 2001: 186, 207); all countries 1973-2015 (World Bank 2018a).

In South Korea, the pattern does not diverge. Following Japan and moving "fluidly through a classic product-cycle industrialization pattern" (Cumings 1984: 2), South Korea took over Japan's older developing sectors—agriculture, steel and chemicals leading to automobile manufacturing, then electronics and other high-technologies—and is progressing toward Japan's income levels. By 2000, South Korea's growth rates expectedly started declining toward the world average.

For China, there is still ample room for catching up: its national income stood at roughly one third of Japan's, its ties to the high technological centers of the EU, US, and Japan are stronger than ever, it is attracting global investments, and its share's of trade with high income economies has grown rapidly. Nevertheless, China's "miraculous" 8% average rates between 1980-2010 are now falling toward other countries' average, with 7% in 2015 emphasized by the Ministry of Finance as China's "new normal" (新常态).

This brief discussion of growth rates since the industrial revolution in the early 19th century until 2015 yields a basic conclusion and a basic fact: Growth rates have rarely diverged from the 1.5-2% average over two centuries.

Growth is a quite constant factor.

1.7 Piketty's Final Conclusion

With these three structural evolutions as key evidence, combined with the reality that growth rates cannot be dramatically affected by government intervention, Piketty asserts that extreme levels of inequality has been a core dimension of economies since the industrial revolution. High income inequality, even more astonishing wealth inequality, and wealth accumulation working at swifter rates than income growth—these structural evolutions all point to rising inequality *unless institutional innovation and interference manages to counter it*, as discussed.

If we take the growth rate of the 1% in pre-war Japan (Figure 1.D), *r*, we get 7.4%. For the entire nation, the average annual income growth rate, *g*, reached 2.1% between 1905-1936 (Maddison 2003: 180-182). The ratio between *r* and *g* is 3.5. The 1%'s wealth grew 3.5 times faster than national growth, exacerbating inequality. Piketty calls this $r > g$ the "fundamental inequality" (2014: 25) of capital growth exceeding income growth.

Given these inequality dimensions of capital concentration, capital growth, and relatively constant and inferior income growth, we are forced to conclude that Kuznets' "95% speculations" are illusions and myths. Rather,

Capital is highly concentrated, yields high income through rents, and grows at a faster rate than aggregate national income, yielding a vicious cycle of rising inequality.

Piketty (2014: 571) concludes his work with the prediction that economic elites, whatever circumstances originally enables a person to enter this apex, will tend to stay there and preserve or expand their ownership over capital and institutions, becoming "rentiers": "The entrepreneur inevitably tends to become a rentier, more and more dominant over those who own nothing but their labor. Once constituted, capital reproduces itself faster than output increases. The past devours the future."

1.8 Conclusion on Theory

Piketty's economics is in some ways a return to Marx's hypotheses, as the title *Capital in the Twenty-First Century* hints. Dispensing with Marx's deterministic methodology and grounding it in statistical data, Piketty's insights arguably support "weaker" formulations of Marx's vicious cycles:

(1) Economic growth does not cause immiseration. It often alleviates inequality, but it is quantitatively too weak to counter capital rents.

(2) It is not true that economic development causes revolutions to occur, but it has historically exacerbated inequality until "it grows to extreme proportions and becomes socially destabilizing" (Piketty 2014: 10).

(3) States are not pure instruments of class war which economic elites use to preserve their influence and wealth. States have been at the center of both progressive legislation redistributing income and regressive protection of powerful conglomerates.

On one hand, the public budget and taxation is the vital source of inequality-reductions through social institutions, but on the other hand, states have been highly reluctant to implement anything that would bring harm to the privileges of elites and it took the upheavals of World War 2 to both destroy a large component of income and wealth and to create the exigencies forcing states to innovate policies. States have historically not been overthrown in popular revolutions but adapted by adopting progressive legislation.

Part 2: China & Economic Inequality

2.1 China's Position in Inequality Economics

With these long historical data series, the current framework of understanding in inequality economics is moving towards a (very) long comparative perspective across the 20th century and between various countries. Fundamental questions of considerably complexity arise from the previous analysis of structural evolutions.

(1) Why is China's inequality currently rising beyond the levels in contemporary Japan and Europe? And why is China not (yet) becoming as unequal as America?

To elaborate, China's average national income per adult stood in 2016 at 14,000 euros, Japan's at 31,000 euros, and America's at 52,000 euros. China can possibly catch-up and achieve higher than average growth rates until it reaches an income level between that of Japan and the US. Hence, a possible explanation of Chinese inequality, we can hypothesize, may be that the coastal areas and urban centers are industrializing faster than other regions which remain predominantly based on agriculture, that is, a traditional Kuznets "development" interpretation. On the other hand, in high income nations like the US, catch-up growth is impossible and inequality must therefore be due to deteriorating industries, unemployment, or defunding of social services and infrastructure, a new "decline" problem.

If this is the case, then we are also forced to reason that if inequality dimensions reach an extreme level comparable to the high income countries in the 1920s-1930s that is too extreme, then greater equality "can only be realised by strong policy measures," as Minami (1998: 55) concluded for Japan and Piketty in general.

The next question is to give an analysis of the various combinations of institutions and policies that characterize China's political economy which contribute to either equality or inequality. Is it possible that China's 1%-dominated society have their fortunes bound to the bottom 50%? For instance by ownership of factory compounds that exploit labor or by state policies that use power to misshape markets, as Sun argues?

(2) Can a certain combination of forces of convergence (progressive taxation, high growth, rising national income) and divergence (regressive taxation, exclusive growth, missing welfare institutions) hinder or push forward China's development?

Has any country ever achieved development without a dimension of equity in income growth and, if not, what role do social institutions such as labor unions, education, and welfare programs have in shaping equality? Was it necessary for World War 2 to break out before Japan, Europe, and the US could finally impose progressive taxation to fund social programs? Can the lower classes benefit from growth and can a middle class emerge at all in a 1%-dominated political economy or are their fortunes and misfortunes bound together?

These questions and the argumentation proposed in Chapter 1 have considerable importance for research on inequality in China, which remain weakly developed and open to exploration. Take Naughton's (2007: 219) long, comprehensive account of China's economy (from a neoclassical perspective). Here we find Kuznets's "95% speculations" from 1955 are referenced as a prime source of theory, restating his hypothesis that "that inequality would increase during the initial stage of development but decrease in subsequent stages." In contrast, Bramall's (2009: 527) monumental work on China's economy (from a human development and inequality-focused perspective) completely rejects the hypothesis: the empirical literature is "unpersuasive" and "One cannot help but conclude that the advocacy of labour migration by many Chinese policymakers is driven much more by a desire to raise profits of urban industry [...] than any realistic evaluation." But Bramall references Anand & Kanbur's (1993) econometrics study, a highly professionalized analysis of mathematical relationships between quantitatively measured inequality and growth in different countries using complex logarithmic equations with up to ten assumptions. These apparently demonstrate a negative relationship between inequality and growth. This is a testament to how research is *stuck in the past*, on the neoclassical side, and *trapped in dead ends* as critical economist attempt to counter mathematics that were never established in the first place. This study will try to incorporate historical events and institutional changes that emphasize the "complex and interlinked nature" (Kenny & Williams 2001: 16) rather "than trying to assimilate them into abstract universal models."

2.2 Sun & the Party's Theory of Development and Inequality

Before Piketty, discussions about scales of inequality and social immobility returning to pre-World War 2 levels were already out in the open. In the US, Nobel economist Stiglitz's (2012: 8) described an American society where, in the wake of the 2008 crisis, "the wealthiest 1 percent of households had 225 times the wealth of the typical American, almost double the ratio in 1962 to 1983" and where *a single* dynasty kept as much wealth as the virtually propertyless bottom 30%. Wealth inequality means that America is increasingly becoming "a land of an inherited oligarchy" (2012: 73) creating a *rentier* society by "shaping markets" in their favor and seeking rents through

> hidden and open transfers and subsidies from the government, laws that make the marketplace less competitive, lax enforcement of existing competition laws, and statutes that allow corporations to take advantage of others or to pass costs on to the rest of society. (2012: 37)

Stiglitz (2012: 35) contrasts well-functioning markets which would theoretically drive down profits to an absolute minimum with rents. Imperfect markets thereby become a central mechanism in rising inequality by channeling income from buyers (labor income) to sellers (corporations and their owners):

> When markets are competitive, profits above the normal return to capital cannot be sustained. That is so because if a firm makes greater profits than that on a sale, rivals will attempt to steal the customer by lowering prices. As firms compete vigorously, prices fall to the point that profits (above the normal return to capital) are driven down to zero, a disaster for those seeking big profits.

In China, a similar debate has opened. Qinghua University social science professor and party theoretician, Sun Liping (2014: 4) brings similar charges against China's economic system: "vested interest groups are emerging from cliques of magnates that form from a foundation of intertwined markets and political power" (既得利益集团就是基于市场和权力相合形成的权贵集团). Sun's analysis agrees with Stiglitz's theory that the promised role of markets in equitable development is being compromised by the reality of power mechanisms that corporate stewards and political networks can harness. The power of laws and institutions to distort markets and raise profits artificially exacerbates inequality.

Sun's analysis focuses on the transformation of China's communist past ruled by "leftist totalitarians" (左派极权) and how "old" (旧) political institutions established in this period has allowed the rise of "magnate capitalism" (资本权贵) today. As Figure 2.A and 2.B document, the top 1% income group in China has risen from receiving a 6% share of national income to 15% between 1980-2010. In the US, the 1% has risen from a 10% share to 20% in the same three decades. In both cases, the decline of the bottom 50%'s share in the national economy has mirrored the 1%'s.

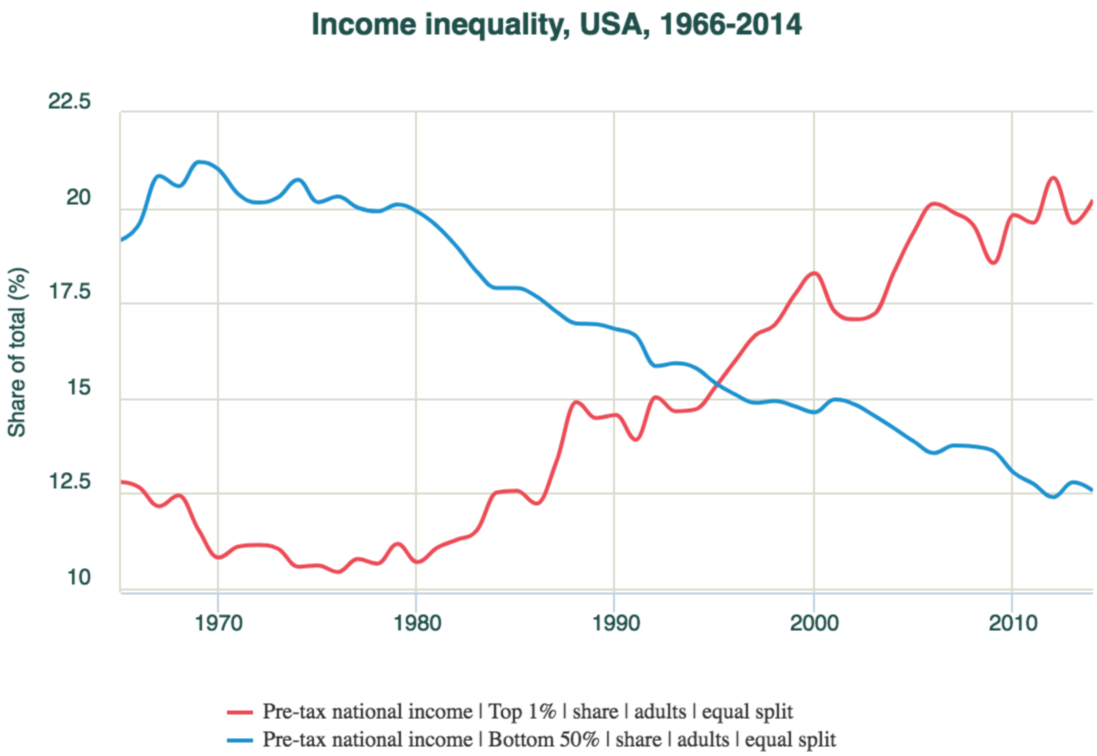

Figure 2.A: The income split between the 1% and bottom 50% in the US.

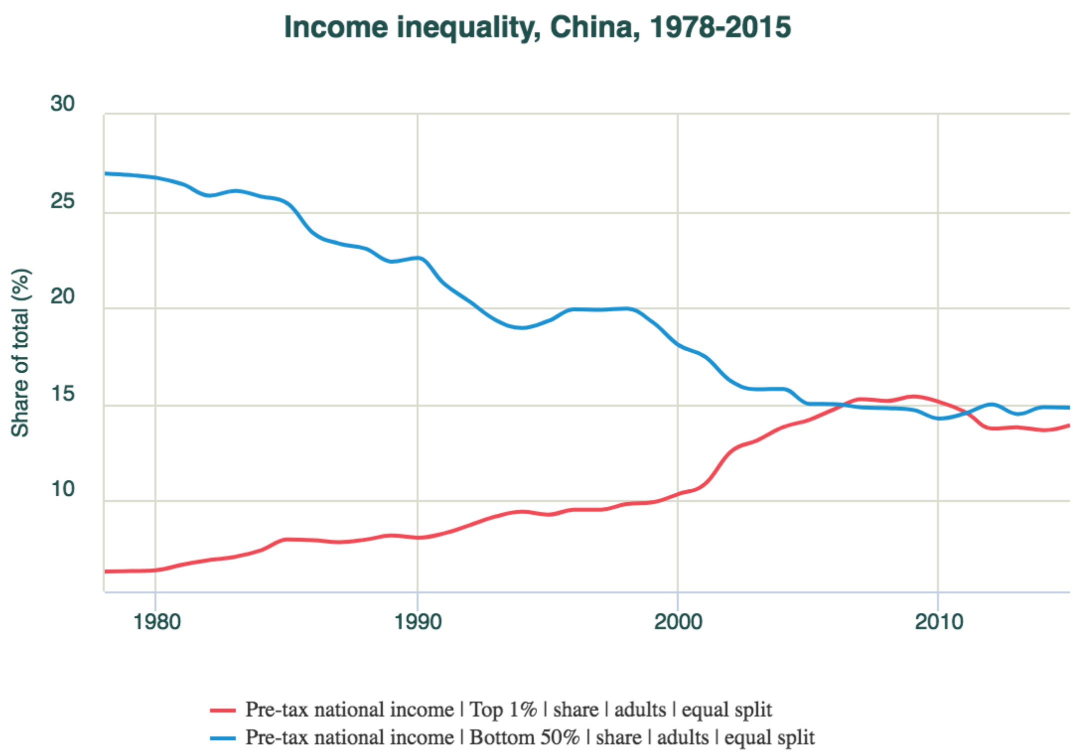

Figure 2.B: The income split between the 1% and bottom 50% in China.

In the US, the bottom 50%'s share fell gradually until in 1995, the top 1% overtook them. In China, the same pattern emerges except the increasing divergence appears to have stopped for now. There are important differences in absolute income growth: in China, the bottom incomes have been lifted during the high growth period, increasing their income by about 550% since 1978 from a very low starting point. Those above the top 10% have increased theirs on the order of 2000% to 2500% (Piketty, Yang, & Zucman 2017: 75). Inequality seems to be trailing off for now. Labor income in the US continues to decline. We are, however, observing trends of highly inegalitarian growth marked strongly by the 1%'s ability to reinforce its own position in these two economies.

Sun (2014: 9), writing in the party's Theory section of the *People's Daily*, links China's current inequality problems to historical development perspectives on both Asia and Europe:

> It is rarely seen in history that a country has developed its economy at a 10% annual growth rate like China in the past three decades. Even if these numbers are somewhat reduced on grounds of faulty statistics, it is still enough to make a country's population achieve a fairly well-off living standard. Japan, South Korea, Singapore, and Chinese Taiwan and Hong Kong have, beginning in the 1960s, spent only 20 years to become well-off countries and common people also became well-off. But in China's development, average growth rates have been higher and its development period longer than theirs, yet the improvement in livelihoods and living standards have advanced at a considerably slower pace.

He asserts that the reasons for this inegalitarian development are a anchored in powerful managers in the state sector and in private corporations. These power mechanisms include (1) bosses pressuring workers' wages and welfare funds, allowing them to seize larger shares themselves; (2) people indebted in a "fictitious economy" (虚拟经济) being forced to pay interests channeled to financial wealth-holders; while (3) small and middle sized stockholders cannot compete with bigger clusters of wealth; and (4) privatization of former collectively owned property.

Sun ascribes inequality to people at the top of China's institutional hierarchies both in the state and private sector. These powerful figures oppose the visions of a core Communist Party. At its heart, the party is infused with a theoretically pure vision of a market society and has been attempting to reform China into modern market society of free economic enterprise. At its core, it is a "market rational" state (Johnson 1982: 21). Since the 1990s,

> the reforms entered a condition of malformation. Political system reforms have been shelved completely, going so far that the favor of governance and lawful rule [政治和法治] are showing signs of discredit. Only

> economic reforms, like a lone soldier, march forward, and because they lack balance of power, lack the transparency of public discussion, lack the common people's ability and right to protect their own interests, marketization and privatization reforms quickly turn into a process of robbing the wealth of the public and society. (2014: 7)

The party's market reforms are by progressive in nature and

> if done well, every single one can solve a big problem for China's society; but if done badly, every one of them can become a deep pitfall. Especially land property reforms, financial system reforms, state owned enterprise reform, finance and taxation reform, which directly link to problems of weighty interest relationships, must guard against being handled and misshapen by vested interest groups. (2014: 8)

The core party's visions and reform agenda have thereby been corrupted by state administrators obstructing market legislation and the dismantling of state industries under "maladministration" and corporate capitalists abusing labor which is why

> a sort of system for distorting reforms [扭曲改革] is already formed. This condition has reached its peak in the [impeded] state-owned enterprise restructuring reforms. After this happened, in the minds of the common people, the reforms have already lost their flavor and are starting to lose popular support. (2014: 7)

The party must tread carefully "in order to stifle magnate groups" and to avoid "walking the road of totalitarianism, but if the magnates catch tailwind, it is likely that society becomes a battlefield for plundering the public and people's wealth. No matter which one happens, the results are dreadful to contemplate" (2014: 4).

In an earlier text, Sun (2007) draws a different historical development perspective between China today and Europe and America in the 1930s, the years of Europe's severest inequality levels and the Great Depression before throwing itself into World War 2. He argues that Europe and America failed to solve a "transition crisis" (转型危机) which would transform its economy from a phase of low wages and a repressed labor class, with corporations producing only "necessities of life," to its post-war phase based on "durable consumer goods," that is, commodities such as modern housing, cars, electronics, and education, which require a middle class to sustain. China's society today portrays the circumstances as Europe in the 1930s: "Our economic prosperity is in an utter mess; production capabilities are strong, but purchasing power is weak; numerous peasant residents move to cities, but wages are humble" (Sun 2007). Developing economies, and China today, relied on low wages and production of basic commodities within the export markets shared between western Europe, the US, and Japan, competing against one another, often on the the same products. This meant that increasing labor income could hurt exports and cause unemployment, with all its negative effects on social order. This low-income based production prevented development toward higher incomes, and therefore higher taxation, which could be used to fund welfare institutions and social security programs. The Great Depression was a symptom of deeper, enduring social organization problems, according to Sun's argumentation.

The resolution in Europe and America was the "social contract" (基本契约). The result of the economic crises was the vitalization of labor movements, and national bureaucracies were forced to develop stronger macroeconomic instruments based on Keynesian expansion of public investments when economic downturns harm employment. This created a compact between labor, state, and capital seeking to influence the new mechanisms of governance. Welfare states now started providing basic social security and income during unemployment, allowing people to build their own livelihoods, and save for greater purchases for more expensive products.

China's inequality and large labor class being similar to Europe in the 1920s, China is perhaps facing the same transition to a middle class society and must find a way to overcome those same obstacles: government must become less corrupt to better challenge corporate interests and impose regulations that urge them to contribute to development, and consumer organizations must increasingly put pressure on employers. In addition, China must do without exploiting Earth's natural resources the way high income countries have done for half a century. These problems must be solved by society's various stakeholders and cannot wait for the "completion of system reform" (改革来完善体制).

Sun's front position as a public establishment intellectual means that his views are probably representative of the problems influential bureaucrats or current party leaders around Xi Jinping identify in China's socio-economic future. In both articles, however, markets, fairness, and competition are put forward as the vital principles to found China's new institutions on.

Our theory chapter brings two relevant insights: first, that growth has never reduced inequality in a society so extremely unequal as Europe or Japan in the 1930s. Only powerful policy intervention, rising labor movements which made their presence keenly felt in parliamentary elections, and progressive taxation imposed on the 1% in the wartime planning economies led to a decline in inequality. These new instruments of governance were used in the subsequent decades to expand welfare institutions. In all high income countries, these decades saw the sudden and unprecedented emergence of *public economies* covering as much as 50% of the national economy in Scandinavia and about 25% in America which were devoted to expanding public education, creating a wholly new labor market of teachers, nurses, etc., and other social programs supporting labor (Cameron 1978; Esping-Andersen 1990). Middle class formation has historically followed a rather radical intervention into the private economy. The 1950s were the first time that state's abandoned only funding and administering a military to devoting such a substantial portion of their economies to institutions based on social rights: free education, unemployment insurance, and pensions (Piketty 2014: 474). It is untenable to believe that markets can play even a primary role in turning China into a equal country, in forming a middle class, and in increasing labor's share. Even Sun's highly idealized description of a party which will not succumb to its own branches of vested interests and which is capable of implementing functioning markets in China, will therefore not pave the way for more equality. This also opens up tough questions how major reforms will be imposed upon China's power elites in the future when parliamentary institutions are lacking and (fortunately) in the absence of a war situation.

2.3 Naughton & the Neoclassical Theory of Inequality and Development: a Case of Myth-making?

In this chapter we will start discussing the academic economics literature on inequality in China. Unsurprisingly, it is heavily marked by neoclassical theories derived from Kuznets. Naughton's (2007) *The Chinese Economy: Transitions and Growth* is one of the major, comprehensive accounts of China's economy. I will argue that this work is built on wrong, neoclassical explanations of growth and inequality. There is no doubt that Naughton's book contains numerous true statements and accurate data, but I will prove that it falls into serious fallacies and is indeed "full of myths" (Chang 2002: 13). "Myth-making" in this case must be understood in Popper's (1994: 7) framework that "Scientific discovery is akin to explanatory story telling, to myth making and to poetic imagination." The difference between myths and theories turning out to be false in the light of new evidence weak enough that myths can be understood as logically invalid arguments such as *insufficient statistics* and *doubtful premises* (Popper 2002/1935).

Naughton begins by stating that his work uses a *development* perspective, arguing against narratives about China as an emerging superpower. In 2007, its GDP per capita remained one-third of the developed countries' in spite of its status as the world's largest economy in absolute numbers. China's development, he says, is a transition "away from bureaucratic socialism and toward a market economy" and is in the "middle of the industrialization process, the protracted transformation from a rural to an urban society" and therefore "in the midst of 'economic development,' the process that transforms every aspect of an economy, society and culture" (2007: 4).

Published before the inequality-development research presented in Part 1, Naughton's work does not draw insights from Piketty (2014) or Atkinson & Piketty's (2010), nor does he discuss earlier seminal works on development such as Johnson's (1982) theory of high growth institutions in Japan's post-war "developmental state" or Sen's (1999) and Chang's (2002) developmental economics associated with the United Nations. Lacking any discussion of the political aims of development—what socio-economic parameters can measure it and whether social welfare or purer growth institutions are its crucial carriers—we can only surmise that it is development toward the "predominance" of markets and that markets are a necessary condition for growth to accumulate income that can be invested in effective social institutions, human skills, infrastructure, and protection of vulnerable population groups can become reality (2007: 5). We are forced to deduce what development framework he uses in the final conclusion.

2.4 Poverty

Naughton's (2007: Chapter 9) account of inequality focuses first on poverty and *the widening rural-urban divide*, a question arguably of equal importance to the rise of economic elites. He contrasts urban and agricultural growth since 1978. Based on Chinese National Bureau of Statistics accounts, beginning in 1978, rural income grew at a soaring rate of 15% until 1985 while urban household incomes grew by 7% annually. This is the only period since the reform era began that "the urban-rural gap narrowed significantly" (2007: 211). In these years the Gini coefficient also dropped from 31.7 in 1978 to 27.7 in 1984 (see 2.G, page 52 below). But the "shoddy calculations" (2007: 211) behind rural incomes use an inaccurate price index of rural commodities. They overstate growth, probably disguising a rural trend comparable to the urban growth level. In the subsequent years 1985-1991, urban income growth was 4.8% and rural only 2.8%. Income inequality started to widen and this trend would proceed until today. In the next period, 1991-2004, the urban growth took speed and reached a very high 7.7% with rural growth following in the pace of 4.9%.

Setting up these contrasts serves the purpose of explaining rising inequality as a problem of China's coastal areas growing ahead of the traditional economy. This first explanatory step is intuitive in a growth-focused explanation.

Naughton proceeds to look closer at poverty alleviation. Here his explanation is best aligned with the UN's development literature. Economic growth does remain a fundamental element in reducing poverty in developing countries. Theories of human development, which are critical of neoclassical growth dynamics, propose that a stronger material basis is an "instrumental freedom" (Sen 1999: 38). Freedom from poverty is the basis for other freedoms by providing food safety, making time available for education, and with literacy more complex organizations appear and professions branch out. The UN's 2030 Agenda for Sustainable Development adopted in 2015 chose "eradicating poverty in all its forms and dimensions, including extreme poverty" as "the greatest global challenge" (UN 2015: 3).

Using Beijing's official poverty line of 627 yuan a year for one person, the 250 million Chinese who lived below the poverty line in 1978 was reduced to 26 million by 2004. Half of these were rapidly lifted out of poverty in merely five years by 1985. That is now over 30 years ago.

World Bank researchers use an international poverty line at 1 US dollar a day which corresponds to 850 yuan. The World Bank's poverty line indicates the threshold below which malnutrition is likely to be a chronic problem, Naughton explains (2007: 213). From using the higher 1 USD standard it follows that in 2004, 12.5% of China's population rather than just 3.2% still lived below the poverty line, going up from 29 to 114 million people. But with this higher standard, China also had many more people living in poverty in 1980 and alleviation was therefore also far greater: instead of 220 million Chinese being lifted out of poverty, the number liberated from material poverty increases to about 400 million.

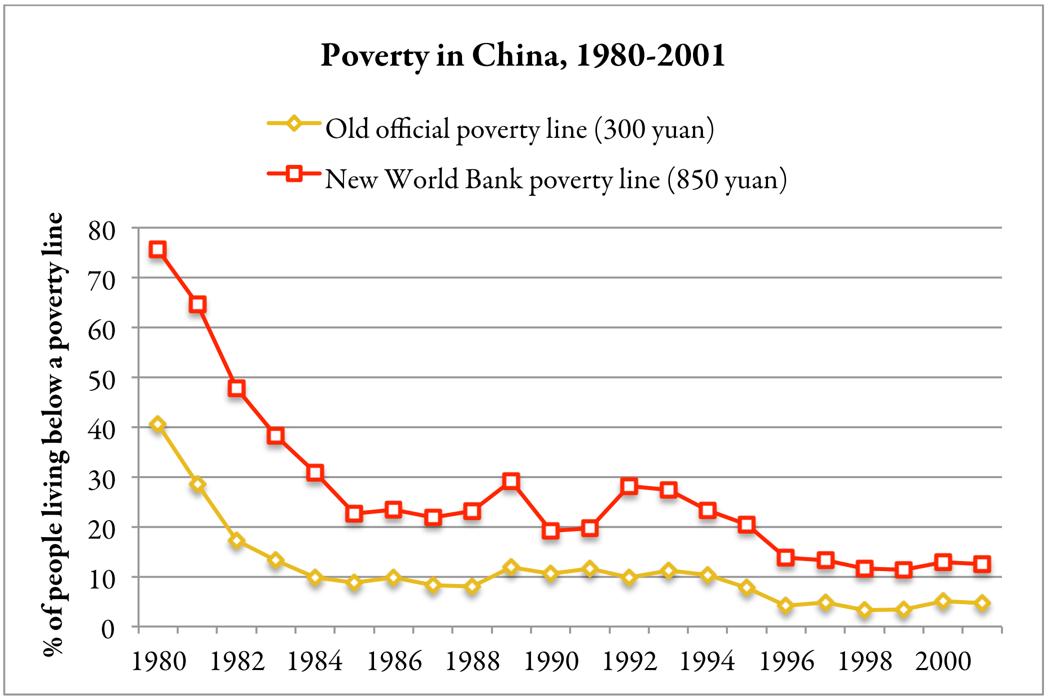

Figure 2.C: Poverty reduction in China.

In the 1980s, poverty alleviation in China was dramatic in both measurements. In the following decade poverty alleviation was slower, even suffering an increase in 1990.
Source: Ravallion & Chen (2007: 7)

Naughton's explanation of this evolution contains the following arguments: The initial immense amelioration of poverty was founded on breaking "policy-created poverty under the previous economic policy regime." Under the planned economy, the agricultural sector providing scarce food resources to the urban centers had to deliver grain in the government procurement program which priced agricultural products lower than their local market value to remove material restrictions on industrialization. In the reform period, this system remained half in place, but procurements prices were set at favorable rates above rather than below local markets, swiftly boosting rural incomes. Especially the famine of the Great Leap Forward and the unrest under the Cultural Revolution led to worse farming conditions. When collectives were dismantled and farm land redistributed "on a highly egalitarian basis," work improved. Again in 1993-1996, better procurement prices alleviated poverty. Naughton states that "marketization of rural procurement surged ahead and government began to provide support for prices for farmers" (2007: 215).

The following stagnation of poverty alleviation is explained, according to Naughton, by misguided infrastructure investment programs which, unlike expenditures in health care and education, prove ineffectual to the poor. The second surge in poverty reduction is connected to government guarantees of basis prices for farm products regardless of market swings or inflation. Migration to urban centers started becoming a significant force, but alleviation has again stalled.

2.5 Discussion of Poverty

The analysis authored by the World Bank's Ravallion & Chen (2007) heavily influences Naughton's treatment of poverty. Their work is a rigorous analysis of economic factors correlated to poverty reduction. Industrialization was very swift in China 1980-2002: the urban population share rose from 19.4% to 39.9%. Their analysis concludes, however, that "75-80% of the drop in national poverty incidence is accountable to poverty reduction within the rural sector; most of the rest is attributable to urbanization of the population" (2007: 11). Their continued argumentation builds on the same findings. Only growth in the primary sector, agriculture, has carried poverty alleviation, not migration, and they find no relationship between falling/rising inequality and GDP per capita growth (2007: 23). The factor weighing heavy in poverty reduction were government decisions to raise procurement prices which stimulated growth to farmers. Before 1980, procurement prices had been set by the central government "below the local market price," as part of an institutional arrangement to channel resources into urban society and support state-favored industries. This amounted to a tax on farming which could again be lifted and even be reversed into a powerful instrument of support. In other words, this vital element in the national taxation system changed from being regressive to progressive, from increasing inequality to reducing it. The first rapid alleviation of poverty, they agree, was the result of one-time events suddenly unraveling the old system. Both the Great Leap Forward and the Cultural Revolution's created disruptions and a "legacy of pervasive and severe rural poverty." The population had been "forced into collective farming" but could now return again to the forms of work they knew when the collective properties were broken up distributed in equal pieces (2007: 38).

To sum up, the "marketization" aspect of poverty reduction is actually rather weak. True enough, governments incorporated local commodity prices as a basis into policy planning, thereby accepting that the state's ability to tax farmers no longer stands above farmer's right to sell their own livelihoods. They simultaneously chose to favor farmers by offering them higher procurement prices above market values, "distorting" the market in the process. As Stiglitz (2012: 40) writes, "Another form of rent seeking" is "selling to government products at *above* market prices (noncompetitive procurement)." The difference is that, based on an inequality analysis or measured against UN's world development goals, it was a *progressive* distortion favoring the bottom of society. Agricultural subsidies in, for example, in the US would be a very different story, because such a distortion favoring large, mechanized agriculture would probably be *regressive*, increasing inequality. This only affirms how markets can reinforce development theory as a kind of rights protection against state hierarchies, given appropriate proportions. But markets themselves are not responsible for poverty alleviation.

Sun criticized post-reform development on the basis that China's 10% growth for three decades is longer period than the rest of Asia and resulting in worse results because of rising inequality. He offers (2014: 9) the evidence that according to the UN's poverty lines, people living for $2 a day are on the verge of poverty and those on $1.25 are in absolute poverty.

> Once we raise the poverty line to a daily income of $1.25, mainland China has 250 million living in absolute poverty. If we calculate with $2 income a day, the whole of China has a population of 900 million poor according to UN stipulations. (2014: 9)

It was possible before for China to both experience a reduction in poverty and an increase in overall inequality, because the income rises needed to alleviate poverty is far less substantial than the overarching inequality structure of the country. It is common that developing societies discard absolute poverty measures derived from food and nutrition calculations once these basic necessities are easily available, in part because living on the edge of malnutrition is not enough to give humans the capability to grow into much healthier beings, increasing their personal welfare and mental health and prolonging their life expectancy (Atkinson 1983: 227).

2.6 Reinforcing Inequalities and Development Before the Reform Era

Economic inequality is a vivid quantitative measure of hierarchy in societies where most important goods—housing, property, food, clothes, and (to different degrees) education, health care, and pensions—are not social rights but based on market prices. Economic inequality is then easily translated directly into social standing. Wilkinson & Pickett's (2009: 26-27) study of the links between economic inequality and numerous social inequalities demonstrates how high inequality is always linked to high crime and incarceration rates, stress, child poverty, worse death rates, and less happiness. They argue exactly that

> it is reasonable to assume that there are differences in how hierarchical [societies are]. We believe that this is what income inequality is measuring. Where income differences are bigger, social distances are bigger and social stratification more important.
>
> It would be nice to have lots of different indicators of the scale of hierarchy in different countries–to be able to compare inequalities not only in income, but also in wealth, education, and power [...]

But these are harder to quantify, yet *entirely necessary*. In poorer developing societies or where authoritarian bureaucracies or conglomerates can single-handedly determine values, hierarchies different from economic resources are in many cases much stronger. Arguably, poverty alleviation in part was granting peasants the *right* to judge the values of their own livelihoods rather than submitting themselves to providing resources to centrally planned industrial drives.

Sen (1999: 30) argues along these lines: to Marx, markets were originally a theory of *individual rights* countering slavery, namely the right to sell oneself to any employer through a formal contract rather than to inherit caste status or debt conferring slave-like status. Slavery and bondage had been at the center of Europe and America's imperial economies (Beckert 2014). To Adam Smith (Sen 1999: 121-6), markets were a highly abstract theory, not a diagnosis of reality, which he devised to counter the dominant influence over state policies that landlord families and merchant groups held. His purpose was "to tax the income deriving from privileges that were the legacy of feudal Europe and its military conquests, and to make land, banking and monopolies publicly regulated functions" (Hudson 2015: 37). Neither of them held any belief that all economic development hinged on the predominance of markets. Smith specifically asserted the *absence* of markets in 18th century Britain.

In China before the incredible poverty alleviation, political hierarchies were also extremely strong. It is entirely *possible* that an economically "egalitarian" country like Maoist China was culturally and politically based on much fiercer hierarchies and repressive policies. These could also exist while common development measures in income, literacy, and life expectancy show progression. This paradox was the case in pre-reform China. In the following chapter, we draw on Sen's (1999: 38) theory of human development which maintains that political and cultural hierarchies affect economic development, creating conflicts that can impede the process. Similarly, providing various freedoms—freedom from material want, freedom for women to choose their own work, or freedom to interfere with legislation, for example—create "empirical linkages that tie the distinct types of freedom together, strengthening their joint importance" in countering those hierarchies.

First some measures on human development (UNDP 1990) in China. Our basic knowledge evidences that China's path to a successful society began before the 1980s. Take the following figures as exhibits—all use the World Bank (2018) as source. From 1960 to 1980, life expectancy rose by 30 years on average. In the two decades after 1980, it rose by ten years. India is seen as a country whose endowments and level of development are comparable. Here China added ten to fifteen years more than India (Sen 1989: 377). This rapid improvement does not testify to a population that lived constantly on the verge of malnutrition but of a society growing in healthiness. Amelioration of poverty, therefore, was possible because state mobilization ravaged society in specific periods while some fundamental institutions continued to support universal development.

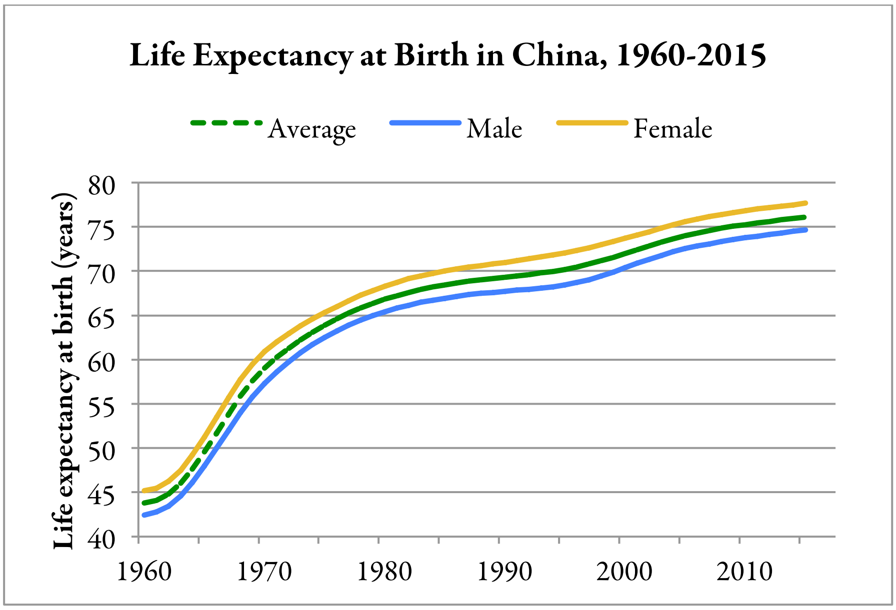

Figure 2.D: Life expectancy.

Infant mortality rates, achieved by expanding sanitation facilities, by educating health care workers, by disseminating health information, and by designating village doctors, declined. In opposition to Naughton's idea that growth is the basis of development, in China human development clearly came first, as Sen (1999: 48) argues:

> the need for resources is frequently presented as an argument for *postponing* socially important investments until a country is already richer. [...] The viability of this support-led process is dependent on the fact that the relevant social services (such as health care and basic education) are very *labor intensive*, and thus are relatively inexpensive in poor—and low-wage—economies. A poor country may *have* less money to spend on health care and education, but it also needs *less* money to spend to provide the same services [...].

Mortality improvements in China even slowed down as the reform process started and the majority of people outside of cities lost health support.

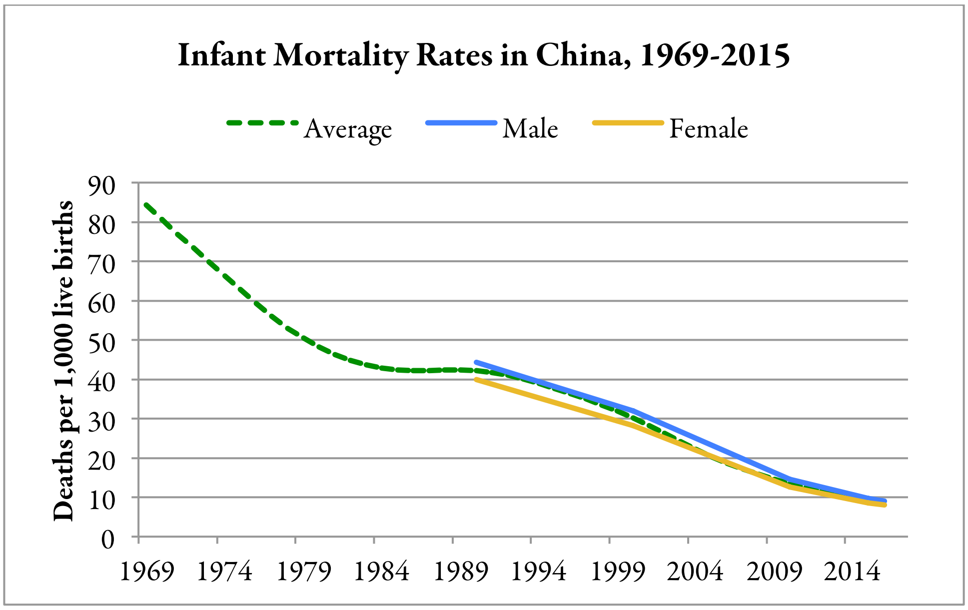

Figure 2.E: Infant mortality rates.

In 1980, China's literacy rate was already at a high 65%, although with a down-pulling element of gender inequality. This must have reflected the dominance of males in upper state sector positions. Women have only begun catching up with men in the 1990s.

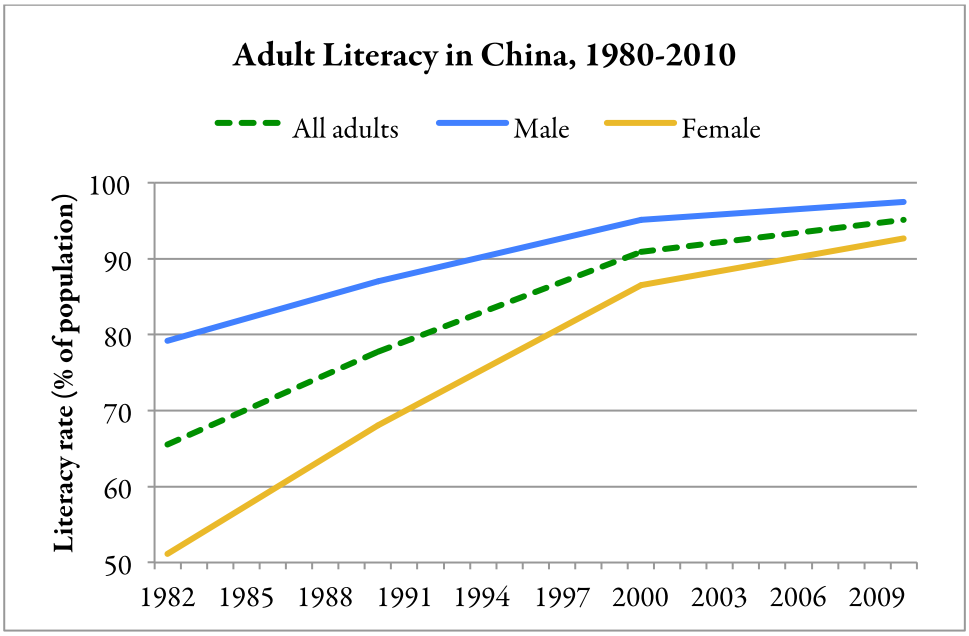

Figure 2.F: Adult literacy.

Literacy has played a vital role in development in both Japan and China. Japan was the "pioneering example of enhancing economic growth through social opportunity, especially in basic education," boasting higher literacy rates than the world's leading economy Britain already at the time of the Meiji Restoration in 1868. It is remarkable that China, too, reached 90% literacy by 2000 for both genders. In the communist period the record is relatively worse: in 1980, only 50% of women were literate.

Sen argues that the key common factor in Japan's and China's high growth economies was maintaining their historically rooted educational systems and expanding them by committing to building public schools while industrialization progressed. Literacy is both a goal in itself, functioning as a means to develop the human reason and as an "instrumental freedom" that is closely linked to other dimensions of development. Literacy and numeracy are the elementary building blocks of higher sciences, from primary school to university education. Literacy allows shared values and rules to be enshrined in literature, it allows individuals to write analyses of society and plan their own participation, it enables organizations and institutions to grow and to base themselves on written rules rather than persons asserting commands arbitrarily, it allows learning in health and sanitation, thereby affecting gender equality (Sen 1999: 195). These empirical linkages are so widespread in developed countries today that they tend to be invisible, but they were important constituents in past development. It is easily seen how, in China in 1980, when 80% of men but only 50% of females were literate, this inequality would exclude millions of women from communicating, organizing, and entering positions in state hierarchies.

2.7 Political Inequality

These human development trends tell us much about China's substantial progress before the reform period. The improvements reflect major choices of committing to national institution-building and are not merely effects of growth in material standards. Rapidly growing life expectancy requires better nutrition during one's entire life. Decades of improved life expectancy does not evidence a society in which chronic malnutrition hindered people from becoming healthier.

Sen argues, from historical examples of imperial Britain's colonies of India and Wales, that famines are not caused by missing material progress but have occurred only in developing countries under authoritarian rule. The famine resulting from the Great Leap Forward was allowed to continue for three years 1958-1961 and probably led to 30 million deaths (1989: 383). Freely flowing information is an empirical link that disturbs distant technocracies. Authoritarian institutions in China's party-state with obedient media and hierarchies of command can shut themselves off from information from civil society and can be blind to signs of emerging famines:

> Famines kill millions of people in different countries in the world, but they don't kill rulers. The kings and the presidents, the bureaucrats and the bosses, the military leaders and the commanders never are famine victims. Democracy, on the other hand, would spread the penalty of famines to ruling groups and political leaders as well. (1999: 180)

India has been able to prevent famines, in spite of a worse development record than China, since it gained independence, whereas China's party-state *created* famines. Nevertheless, China's record on human development exceeds India's in the long run:

> had China's lower mortality rates prevailed in India there would have been about 3.8 million fewer deaths in India a year around the middle of the 1980s. That indicates that every eight years or so more people in addition die in India—in comparison with Chinese mortality rates—than the total number that died in the gigantic Chinese famine (even though it was the biggest famine in the world [in the 20th century]). (Sen 1989: 384)

It is necessary, therefore, to adopt analytical categories that accommodate this conflicting evidence of long-term health improvements and authoritarian interventions harming health. China's party-state was authoritarian: it imposed strong political hierarchies upon the press, which was incorporated into the state sector rather than being allowed independence. A distant technocracy is vulnerable to missing critical information about the circumstances in society outside its own vision and it may enforce the imposition of destructive policies which neither humans nor nature can accommodate.

2.8 Authoritarianism & Inequality

In this section we will start discuss how the party-state, far from being committed to egalitarianism, both contributed to the creation of the extreme levels of inequality today and entrenched an institutional legacy that exacerbates inequality in the growth zones.

For our purpose of inequality analysis, the origins of China's party-state is important to understand. The Communist Party was organized around the central committee, eventually dominated by Mao Zedong, which was the highest link in the chain of command through China's long decades of civil war. Its efforts were directed toward shaping the party into as a centralized, streamlined military apparatus. Its cadres were to be pure practitioners of communist theory and numerous cleansings of political dissidents took place. The military-political development of the party was worsened during World War 2 when

Japan's colonization of Manchuria was extended to outright invasion and conquest of central China (Matsusaka 2001). The party was radicalized over time, and "The ultimate legacy that emerges from the long struggle for power" was

> the foundations for a vast, militarised bureaucracy that excelled at extracting sacrifice from subject populations and party cadres alike. This was a revolutionary organisation determined to achieve a large objective, quickly, against seemingly impossible odds, heedless of the costs to the party and the people. (Walder 2015: 39)

The party's first campaigns in the countryside after 1949 should not only be seen as an egalitarian fulfilling of a communist redistribution of farm land. The party did not systematically expropriate land from rich peasants who were thought useful in developing agriculture (Bramall 2009: 95). Other types of land lords, local rulers, village leaders, and suspected members of organizations that could muster obedience or foster loyalty from their roots in traditional local institutions or were seen as old elements whose socio-economic organization obstructed modern development efforts by living on a stagnating economy and eliciting rents from peasants. These pre-modern elites had, to party leaders, been unable to direct a common effort of nation building, economic planning, and resistance against the capitalist empires. The campaigns before 1949 in the countryside were as much used for establishing the party as ruling regime:

> revolutionary land reform was above all an act of state building: it destroyed the foundation of the previous order, cleared the ground for new political organisations, recruited new leaders from among formerly marginal social groups, and granted benefits to the vast majority of farmers that would create widespread support for the new party-state. (Walder 2015: 47-48)

2.9 Regressive Taxation

Drives to rid a society of former elites dominating the agricultural economy who acted as agents of economic stagnation also occurred at the beginning of Japan and Korea's "developmental states" (Kohli 1994). Prior to the start of industrial growth in 1886 in Japan, the Meiji state (discussed in Part 3) started out, unsurprisingly, by setting up a centralized bureaucracy strong enough, after a civil war and several rebellions, to take away the prerogative of local lords, the *daimyo*, to elicit taxes. Extracting resource from the agricultural sector in the beginning of a development period is a part of channeling resources into industrial growth sectors. In Piketty's inequality framework, such a taxation system eventually becomes *regressive* if the tax burden is not shifted onto the industrial centers. All developed societies have started their funding of infrastructure, bureaucratic apparatuses, and armies by similar schemes no matter how central or peripheral markets were.

China's "command economy" (Naughton 2007: chapter 3) is no different. The party-state used its position at the apex of the economic planning to determine procurements of agricultural products which were delivered to the state sector's industrial projects under management by bureaucratic hierarchies. This element was one crucial element in shaping the country's development inequality. China's procurement system remained in place until the 1980s. As discussed above, rapid poverty alleviation was achieved by lifting this system, and the only equality-improving period in reform-era China is accounted for by reversing this system.

To enhance the state's ability to control the command economy, to prevent unwanted migration, and to preserve the agricultural basis for the state's favored industries, the *hukou* registration was set up. This system imposed highly unequal statuses to people based on the region they were born into. Children born into urban families whose parents were employees in the state sector would in many cases inherit their parents' positions when they reached pension age. These elements portray clear, extreme inequalities in rights that are *easily, directly, and forcefully linked to economic inequalities*. They continue to work in China even today.

2.10 The Party-state & Inequality

To understand how those hierarchical institutions of the party-state emerged, Dillon's (2015) analysis in *Radical Inequalities: China's Revolutionary Welfare State in a Comparative Perspective* is highly relevant. She traces the origins of the Chinese welfare state to the 1940s when the Nationalist and Communist parties vied for power in China's urban centers. Labor unions were the most strongly organized domestic institutions in industrializing urban zones and functioned with some autonomy while balancing against the two parties competing for political power, and the imperial zones, and acted in international forums like the UN's International Labor Organization, including directing international aid and relief funds. Leadership in the internationally recognized unions gave a voice in vital diplomatic affairs at a time when empires were still openly fighting in Asia. There was widespread agreement globally that welfare state policies, pioneered in Europe, quickly spread to America and then to much of the colonial world. Welfare policies were a "globalization" phenomenon (2015: chapter 1) seen as the solution to social instability, political loyalties in question, and to making industries more productive by giving people stable livelihoods.

Labor unions had been built up over decades as a part of China's urban economy. During Zhu Xuefan's chairmanship in the years after World War, the Shanghai General Labor Union came to incorporate 453 enterprises and over 500,000 members (2015: 93). Both the Communist and Nationalist parties competed on promising state-building based on welfare policies, but when the CCP came to Shanghai as victors in 1949, they met a society outside their influence. The Nationalist party, unions, and the Green Gang crime syndicate, to which Zhu held long-time affiliations, were rooted here, and CCP first Campaign to Suppress Counterrevolutionaries (镇压反革命运动) targeted persons who had ties to these institutions (2015: 141). For remaining members, however, worker welfare was in fact enhanced. Through the Shanghai Federation of Trade Union, labor insurance was expanded to over 300,000 people in 611 enterprises.

In 1951, debate on union independence and its autonomy from the party government became central to the party leadership. Li Lisan, the administrative leader of the All-China Federation of Trade Unions, backed by Liu Shaoqi, advocated a degree of autonomy by allowing union officials to represent workers in conflicts with party committees. Mao took the side of Li Fuchun, the man in charge of consolidating the economic planning system, by favoring increased party-control. Li Lisan was purged from his leadership seat in secrecy to avoid conflicts breaking out, "an indicator of how fragile labor's gains under the new political regime really were" (2015: 152).

The expansion of welfare programs in urban China were a fundamental pillar in the development strategy adopted from Stalinist Russia. Administrators replaced labor markets by enrolling workers in the Universal Job Placement Program, then moving them to welfare programs during unemployment phases and when new industrial aims were set. They were provided housing and necessities to support their daily lives while working most of the time. Unemployment was conceptualized as "surplus labor" (2015: 170) created by a backwards economy.

Along with the first Five Year Plan, the union hierarchy was purged further down the organization after Li's exile, and a young loyal party secretary, Lai Ruoyu, was given leadership. Registrations for job placement increased by nearly 200,000 to 375,000 1951-1954. "Top-down pressure stemming from China's new economic development strategy and a sudden surge of bottom-up demand for welfare quickly produced results" (2015: 188). By 1954, 13% or 849,000 Chinese workers were covered by welfare policies.

The First Five Year plan did not create the maintained industrialization it had done in the Soviet Union but ended in a recession. The solution implemented by Mao and his faction was attempting to accelerate development by cutting welfare programs and using the newly available resources as investments.

Mass "ruralization" (下方) of the recent unemployed required tight control. In 1955, China's household registration policy was implemented to fulfill this purpose. It was extended to the countryside and movement of one's residence now required official approval. The agricultural economy was used as the remedy for unemployment as registered people were distributed to land lots. Major cities like Shanghai evacuated 684,000 people without proof of residence. While unemployment programs were cancelled, social relief handouts to employees reached over 1,100,000 in 1957 soaring from 362,000 three years earlier due to the recession. Labor insurances came to cover over 900,000 people in Shanghai in 1957, increasing from 109,000 in 1955. This expansion was spurred by the formal transfer of enterprise properties to the state in those years to facilitate better control during the second Five Year Plan.

The unions were subjected to similar reforms and became structured with a vertical party hierarchy mirroring and acting above union staff in the fashion the party hierarchy mirrors ministries today. This system quickly collapsed and 92% of staff in the Shanghai Federation of Trade Unions was removed and responsibilities handed over to the Labor Ministry: "for all intents and purposes, the union was now a subsidiary of the party committee in each state-owned enterprise" (2015: 224).

Social policies in the urban centers grew in step with the creation of an increasingly centralized and authoritarian party-state. The division of the population into state-sanctioned social classes became entrenched as the five year plans failed to create employment. Unemployment was solved by moving people back from wage work to farming. These vicious cycles of extracting resources for investments, increasing welfare spending for state employees, and sending others back to the countryside were policy-created inequalities.

The Great Leap Forward was another such vicious cycle, an attempt to "Accelerate economic growth by a radical transformation of the relations of production (collectivization and nationalization)" (Bramall 2009: 149) made possible by establishing communes to care for basic living necessities and freeing up labor and resources. Meal halls should provide the collective necessary food. Daycare for children and elderly should give adults more time to work. Accessible clinics should treat injuries quickly. These visions were also an attempt at establishing a universal welfare state based on cultural transformation around a communist ethic covering the entire population within a few years.

It was accompanied by the Anti-Rightist Campaign to identify and expel "bad elements" of the "old society," targeting protesters in the cities. Civil society was thus weakened in another mobilization campaign and collective action did not emerge with the initiation of another ruralization program. Under the Great Leap Forward, institutions of population control were set up to solidify the registration system:

"each district government established its own shelter to supplement the municipal shelter" to "detain people targeted for evacuation." Resident committees mobilized "housewives and social relief recipients to investigate detainees." "New bureaucratic procedures were established to review the household registration, employment status, and political history of every person detained." "Finally, the transportation bureau set aside daily quotas of train and ship tickets to transport people out of Shanghai" (2015: 234-243).

These development policies exacerbated problems in the economy. Targets and procurements were constantly raised while food production declined. Fewer acres of food were planted while labor was allocated to large infrastructure projects in the countryside. Food was handed out in unlimited quantities in common halls. The radical political atmosphere and the decimated unions and civil society were followed by struggles within the party-state. When famine set in already in 1959, Mao had to denounce Peng Dehuai as a traitor, purging him from his Minister of Defense post (2015: 244-245). As political opposition in the bureaucracy also disappeared, the famine was allowed to continue for three full years.

Following both the five year plans and the Great Leap Forward, the urban welfare state grew and consolidated itself. Power over material well-being was grasped ever tighter by the party hierarchy.

> In this context, where the difference between employment and unemployment determined people's fate—where they could live, what kind of work they could do, and how they could survive the economic crisis—jobs and all the privileges that came with them became the ultimate resource for patronage politics. (2015: 261)

Walder (1983: 52) argues that welfare programs basically became instruments of party-control in this period. Party members in positions to reward food tickets, housing, party membership, to determine who would be forced to leave for the countryside, and to place people in a rigid wage hierarchy enabled them construct economic dependencies and a culture of submission that supported the party-state:

> To buttress this system of leadership, reward systems were formally politicized—workers were rewarded [...] for their loyal response to the Party's calls to work hard, to make sacrifices, to develop a deep commitment to Party policies, and to exhibit this commitment in the factory's organized political life.

2.11 Conclusion on the Party-state and Inequality

The consolidation of the party-state explains several core influences on China's inequality today.

First, the party infiltrated unions and incorporated them into the party-state hierarchy. Union independence disappeared and solidarity between different groups of workers was weakened. This made it less possible for civil society to resist mobilization campaigns and to oppose the registration system invented to administer people and submit them to economic plans. Welfare programs became rewards for fulfilling targets in the plans.

Second, the rural-urban divide was widened by policies that expanded welfare in the rich region while using agriculture as a resource support base. When these policies failed to sustain employment, welfare programs became costlier. Unwanted unemployed were evacuated to the countryside.

Third, the crises created by economic planning necessitated stronger mobilization campaigns against political opponents. In the Great Leap Forward, fully fledged institutions of surveillance and evacuation became entrenched.

Sen (1999: 182) argues that democracy creates a necessary information link that prevents distances between realities of human and natural resources to widen enough to create famines, as Mao himself eventually recognized:

> Without democracy, you have no understanding of what is happening down below; the situation will be unclear; you will be unable to collect sufficient opinions from all sides […] top-level organs of leadership will depend on one-sided and incorrect material to decide issues

We are now starting to see clearly why inequality economics is a powerful analytical instrument and why history is such an important part of understanding it. Scott's (1998: 4-5) *Seeing like a State* argues that disasters follow the combination of four elements: "administrative ordering of nature and society," a "high-modernist ideology" of a "strong, one might even say muscle-bound, version of the self-confidence about scientific and technical progress," and an "authoritarian state that is willing and able to use the full weight of its coercive power to bring these high-modernist designs into being" and a "prostrate civil society that lacks the capacity to resist these plans."

2.12 China & the International System

The myth that China was an "isolationist" regime "deeply suspicious of Western institutions" and holding a "strong aversion to foreign dominance that led to support for closed-door socialist policies" (Naughton 2007: 50) is as common in the economics literature as the "egalitarianism" myth. Amy King (2016) had for a while access to the Chinese Ministry of Foreign Affairs' archive. Documents show that Chinese leaders constantly attempted to break out of the Cold War isolation and to rebuild economic ties with Japan, but where blocked by Washington who feared Beijing as an example of "revolutionary change leading ultimately to a Communist World" (Peck 2006: 10).

In 1953, an American chief economist in occupied Japan wrote that Washington raising barriers between China and Japan were unwanted in Asia and harmful to economic revitalization:

> The harsh economic realities require a greater volume of export trade from Japan before she can be said to be self-supporting. But trade outlets are denied or limited in some directions by high tariffs, closed in others by bitter memories of war, and in the direction of Red China and the USSR they are held to a trickle by—let us be honest with ourselves—by the insistence of the United States in the first instance, and only secondarily by the conviction of the Japanese Government, and scarcely even remotely by the agreement of the Japanese people. (King 2015: 102)

On Beijing's side, key dimensions of Japan's economy were regarded exemplary for China to follow. Japan was the only Asian country that had successfully industrialized, its natural endowment of a large population and intensive rice agriculture was easily comparable, it held vital development technologies, and Japan had left behind core heavy industries in Northern China that were chosen as key in China's own early industrialization drives. During a visit in Japan in 1958, foreign minister Chen Yi explained to the Chinese-Japanese Import-Export Association devoted to reestablishing trade connections across the Cold War political borders that

> We will look towards Japans for agricultural study, and will study three things: 1) extermination of insects and pests, 2) chemical fertilisers, 3) water and soil conservation. This will allow us to increase our scale of production. We estimate that in ten years or eight years, or even shorter, say five years, we will be able to attain the targets of our Program for Agricultural Development. (2016: 132)

He predicted that China's isolation would be withdrawn "in another four or five years, or seven or eight years," and China enabled to restore diplomatic relations:

> Today's situation cannot continue for a long time. Japan should not stop building ties with China or sacrifice its friendship with China, for the sake of its friendship with the US. The current relationships are not normal. A normal relationship ought to be a diplomatic one, with developed trade and cultural ties, and bilateral cooperation. We believe that one day we will achieve this, don't you? [...] The world situation is shifting quickly, and developing in the direction of reconciliation, and friendship, and mutual trade. The China-US relationship is also like this. The US President will one day recognise China, today's situation is only temporary [...]. (2015: 145)

Mao, too, saw dimensions of Japan as a model for Chinese development. Speaking with Japanese Diet members, he proclaimed that "Your economy, culture and technology are all relatively more developed than ours, so I am afraid to say that we cannot help you, it is you who will help us more." Japan's "economy and culture are ahead of China's. It is said that there are seven universities in Okyama prefecture. We have Wuxi, whose culture is relatively developed, but it does not have seven universities. We have no such county that can be compared with Japan" (2015: 189).

Not just human development institutions such as education but also Japanese aspects "of greatness and power" were a model for Chinese socialist development. In 1963, Mao discussed with the Japanese Communist Party's leader:

> It took Japan one hundred years to change from a feudal society into a capitalist society following the Meiji Restoration of 1868. In 1968 it will have been one hundred years. The Japanese working classes under this capitalist system have created a huge production capability, and have transformed Japan from a feudal society into one the few great and powerful countries in the world. There are less than ten countries that have genuinely crossed the agricultural industrial barrier, there are none to rival you. We are currently going down this road on the basis of socialism, and perhaps won't need a hundred years, perhaps we will only need half that. You are helping us, not only terms of the political struggle, but also in terms of the technological revolution. (2015: 190-1)

These quotations are relevant because the hostilities against China in the Cold War imposed on it less advantageous conditions. China's forced isolation in the post-war decades cut it off from the rapid growth pattern experienced by Japan, South Korea, and Taiwan. As Cumings (1984: 24) has calculated, in these decades, a very small country like South Korea alone received economic aid of 6 billion USD from the US, rivaling the entire amount given to gigantic regions like all of Africa or transferred from Russia to the Soviet economic bloc. Japan and South Korea were allowed to export to the high income US market for decades while imposing strict import barriers on their own markets and being offered technology transfers over the period. Europe's high growth reconstruction period after World War 2 saw similar infusions of US dollars. As Beeson (2009: 9) argues, China was on the wrong side of the Cold War while America's hegemony meant Japan "was able to take advantage of a rapidly expanding international economy and relatively unfettered access to important markets in Europe and North America, without having to open up its own markets and, crucially, while maintaining control of the domestic financial system."

2.13 China's Social Classes in the Reform Era

We are again approaching the question how this institutional legacy is impacting inequality in China today. We saw that poverty was alleviated with the end of the planned economy. These years until 1985 were the only years in the reform era inequality fell substantially. However, independent unions were destroyed and incorporated into the party-state and the household registration system was institutionalized. Both of these hierarchies still stand firm.

Around 2000, the Chinese Academy of Social Sciences published their comprehensive survey of China's "social classes" (社会阶层) based on occupations. Lu's (2003) article Contemporary China's Class Divisions and Changes analyzes this data (with 1088 citations on Google Scholar). The highest social class consists of "national and public administrators" (国家与社会管理者) and the second highest is "corporate stewards" (业主身份的管理人员). "The organizational resources they possess are strengthened and their share of society's economy has increased." These two groups are bracketed in the top 2.5% of the population as the two most powerful classes in a hierarchical structure. They command the greatest reservoir of economic resources followed by white collar workers, urban labor, and agriculturalists, etc.

Lu (2003: 5), explains the emergence of classes in China as a normal result of market reforms. He refers to a development theory similar to Kuznets'. Overarching is the path of "construction of socialist modernization" (社会主义现代化建设):

> China is facing the realization of changing from a traditional agricultural village society toward a modern industrialized and urbanized society. It is simultaneously realizing the project of moving away from a planned economy in the direction of a socialist market economy which our predecessors failed.

This transformation has created class divisions common in "developed countries" (发达国家). He draws a perspective to Japan and explains that labor markets must be free and unimpeded to allow agriculturalists to migrate to the industrializing coastal zones and form a working class that can develop to skilled professions which are the foundation of a middle class society. Fluid labor markets will create class mobility. The reform process remains incomplete as "The traditional concepts of household registration have not to this day undergone fundamental reform" (2003: 7). The government's "visible hand" (有形守) must remove these institutional constraints which currently bind people to their old social classes.

This argumentation links to the Kuznets hypotheses and to Sun and the party's development aim of dismantling Maoist institutions in support of middle class formation. Two facts remain: during China's reform and high growth period, the party hierarchy and corporations have expanded their power and the old instruments of population control remain entrenched.

2.14 Naughton's Account of Inequality

We return now to Naughton's account of inequality (2007: 217-21), proceeding into the reform period. Our purpose is to relate his explanations to Kuznets growth-equality theory and Piketty's refutation of these hypotheses.

Naughton begins by presenting China's Gini coefficient 1980-2002 (2007: 217-18), reproduced in Figure 2.G using the World Bank's summary index (with slightly different values than Naughton's). He explains that before 1980, China was "dualistic but egalitarian. That is, although the gap between urban and rural residents was large (society was 'dualistic'), incomes were fairly equal within each of the urban and rural sectors ('egalitarian')." In 1983, China's coefficient fell from 0.32 to 0.27 in 1983 "which made China one of the most equal countries in the world."

Figure 2.G: Evolution of China's national Gini coefficient since the reform era began.

Inequality fell slightly 1980-1983 but has since then risen at a high pace for two decades.

Source: World Bank (2017b).

Two decades of worsening inequality has resulted in China entering the ranks of the most unequal countries in the world. In 2002, its Gini soared to 0.54, a 97% rise. For comparison, Japan (0.24) and South Korea (0.34), which reached Europe-level national income at the time, remained roughly the same level (even declining in Japan's according to this measure), and India (0.32) stayed at the same levels, and so did the US (0.46). There "may be no case where a society's income distribution has deteriorated so much, so fast" (2007: 218). Naughton actually remains uncommitted to even explaining this rise. He refers (2007: 219) to Kuznets's "pioneering" scholarship from 1955 on "the economic development process" stating that high inequality is common as migration and urbanization progresses. Market reforms in China have "contributed to inequality" simply because they "led to the acceleration of urban economic growth." He explains Kuznets's argument

> that inequality would increase during the initial stage of development but decrease in subsequent stages. Kuznets logic was that pockets of modern economic growth would first generate high incomes in a few limited areas while income remained low in most of the traditional economy. The first phase of this prediction certainly seems true for China [...]

But, he adds, several factors have made the Kuznets transition even worse: China's size limits spillovers, foreign investments have been specifically directed into coastal areas, and "the legacy of socialist institutions" has reinforced the rural-urban divide. In the end, Naughton (2007: 220) vaguely suggests that inequality scales in the future will depend on industrialization spilling over into the countryside, on political and legal reforms founded on making China "fair and more predictable," and on "reducing special privileges."

His main attempt to account for increasing income inequality is an appeal to the emergence of "returns to various kinds" of "income-generating capital," mentioning only "human capital"—but, significantly, ignoring wealth as in Piketty's analysis—and "market distortions, including corruption and privileged access to opportunities."

"Human capital" is essentially the theory that the number of years spent in education, if the educational profile is relevant to employment opportunities, should result in a corresponding increase in income afterwards. This is justified on the basis that education builds skills and knowledge that increase productivity. Well-functioning labor markets must reward human capital with income according to productivity. An education-based economy and its professionals are considered the backbone of an emerging middle class. The theory is distinct from "human development" which aims at "the ability—the substantive freedom—of people to lead the lives they have reason to value and to enhance the real choices they have" while the first "tends to concentrate on the agency of human beings in augmenting production possibilities" (Sen 1999: 292).

Naughton (2007: 193-95) argues that predictably higher returns on education that exceed the "expensive" costs are necessary to give "incentives" to invest in obtaining knowledge. Through the 1980s and 1990s, the income return per year of education rose to roughly 10% whereas before there had been no consistent pattern of longer educations resulting in higher incomes. Party membership, male gender, and seniority were more important factors. In the 1990s, 3% of China's GDP was spent on expanding education and funding was directed to building higher education. About 1% of the population had 12 years of education or above in 1982, rising to 6.7% in 2004. While one million graduated with a college degree in 2001, three million did so in 2005 (2007: 196).

There are two questions about this explanation. First—a question of statistical relevance—does human capital from higher education in fact substantially constitute the forces behind inequality in China? Second—validity of argumentation—do individual incentives and labor markets explain this rise? To address these questions we turn to Piketty's research on China.

2.15 Summary of Arguments

We now have several candidate theories for explaining rising inequality in China.

(1) Dillon's (2015: 295) *narrow welfare state hypothesis* argues that "the long-term legacy of a narrow welfare state in China may be persistence of high levels of inequality long after the limits of narrow coverage are overcome."

(2) Most of the leading scholarship on inequality, undoubtedly with substantial weight behind it, would seem to support Dillon's proposition with the argument that the *rural-urban development gab* is widening because of missing development in the countryside. This is rooted in "the heavy-industry development strategy [which] played a key role in forming the enormous rural-urban gap in the pre-reform period, while openness and decentralization contributed to the rapid increase in inland-coastal disparity in the reform period" (Kanbur & Zhang 2005: 101).

(3) Sun and Lu identified remnants of communist institutions in the form of totalitarian population control binding people to villages, preventing them from migrating to developing areas to form a new working class, as well as vested interests corrupting the party's visions and market reforms of both labor and corporations.

(4) Naughton's *growth-education hypothesis* attributed rising inequality to growth in the special economic zones outstripping other regions, with education providing human capital to confer income discrepancies based on market rationality.

(5) In Part 1, I accounted for Piketty's conclusions that extreme inequality has never historically been reduced by growth and that unwinding the different dimensions of inequality shows that income inequality is tied to wealth concentrations.

2.16 Piketty's Empirical Foundations for Inequality in China

We begin by building a case for rising inequality based on the theoretical conclusions presented Part 1 and its relevant literature on China (Piketty 2014; Piketty & Atkinson 2010; Piketty & Saez 2014; Piketty, Yang & Zucman 2017; Piketty & Zucman 2014).

First of all, the 1% highest income group is rising to occupy a powerful position in China's national economy. In the most economically unequal societies in the world, the 1% received a 20% share of total national income. America and Japan before World War 2 and America after the Great Recession of 2008 are among these societies. In China today, the 1%'s income share has soared to a 15% share in three decades.

So far, that rise has halted for a few years. Such a small timeframe makes it far too early to conclude whether inequality will rise, fall, or stabilize over the next decades. The stabilization could be a statistical problem (Piketty, Yang & Zucman: 30). There is wide consensus that all inequality measures are significant understatements. Forces for convergence have also contributed: wages of migrant labor has risen and the number of migrants receiving those have grown; government stimulation packages were activiated during the recession starting in 2008; and new rural welfare programs are being implemented (UN 2016: 87).

But the strongest, most substantial force behind income inequality is *wealth* inequality. Figure 2.H below shows the evolution of wealth inequality through the top 1% and top 10%'s share of national wealth in China, 1978-2014, with the US added as a comparative perspective far above Europe and Japan. The top 10% in China started out owning 41% of all wealth in 1978, increasing their share to an immense 67% in 2014. This ranks only slightly below the US where the 10% held 73% in 2014. Within these classes, the Chinese 1% alone grew their wealth from 16% to 28%.

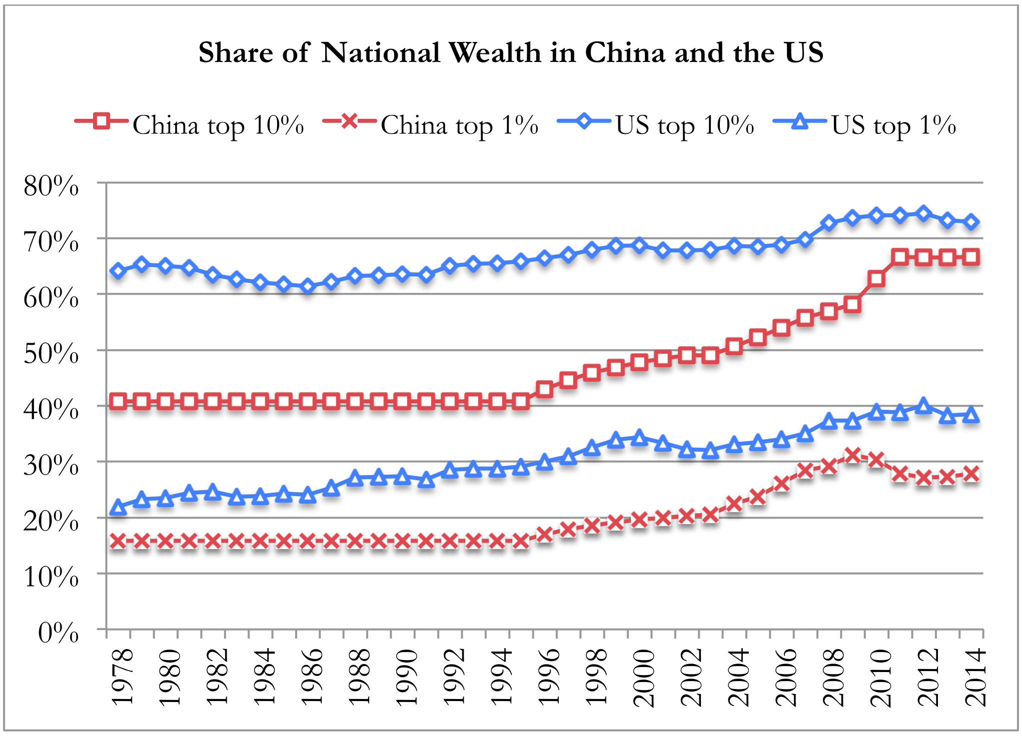

Figure 2.H: Top 1% and top 10% wealth shares in China and the US, 1978-2014.

Source: WID (2017).

To grasp the sheer magnitude of these inequalities we must understand how this wealth has grown compared to the entirety of the national economy's income. Piketty uses a wealth/income ratio to demonstrate this magnitude. We take the value of wealth and divide it by the national income in a given year. Figure 2.I below shows that evolution. In 1978, China's national capital, wealth, and assets stood at about 375% of annual national income. That is the same as saying capital was worth as much as 3.75 years of total national income flows in China that year. This amount grew to 700% in 2014, rivaling societies before World War 2 (Piketty 2014: 147). Saying that the 1% owns 70% of all wealth is therefore saying that 1% owns wealth amounting to no less than two entire years of the total income received by more than 1 billion people.

China's Wealth-income Share and the Composition of Capital

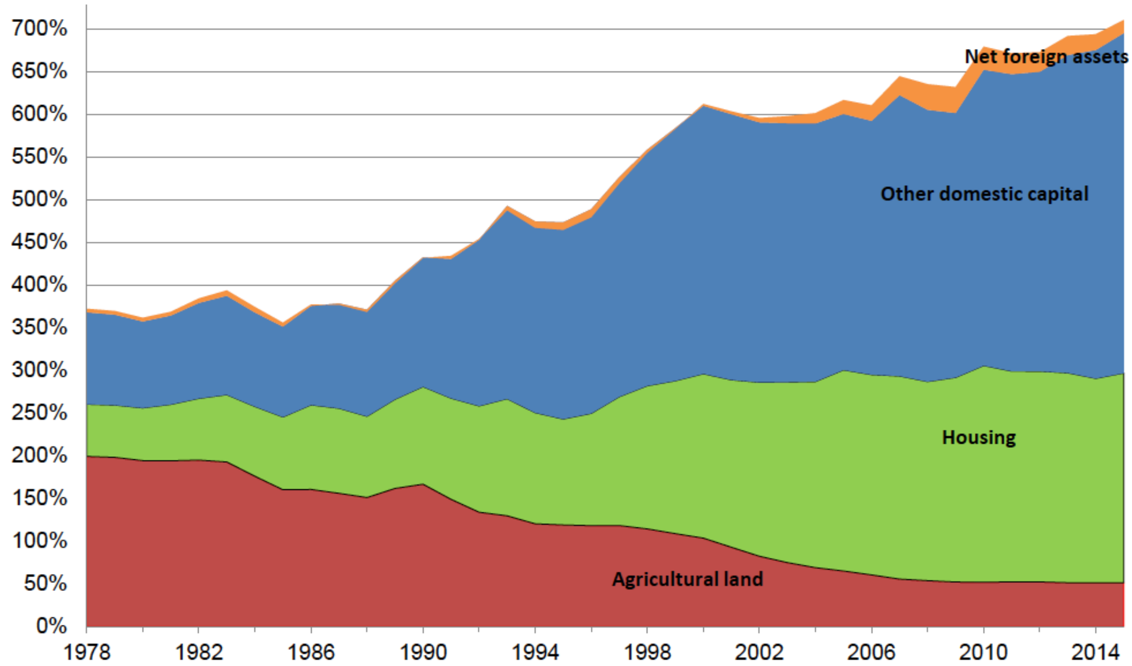

Figure 2.I: China's wealth/capital ratio and its composition.

Source: Piketty, Yang & Zucman (2017: 50).

An analysis of the composition of capital in China shows that agricultural land now has very little value, standing at only 50%. Redistributions of land to the farmers constituting the bottom 50% has occurred several times in China, but it will have very little impact on either wealth or income inequality because industrial assets, housing, and financial capital have far greater value.

Housing in the urban sector has become highly valuable, growing from constituting 50% to 200%. But capital ownership is the greatest dimension of wealth inequality, increasing from a 125% share to 500% in 2014. Wealth outside of the 1% is often housing property. Privatizations have especially benefitted workers in the old party hierarchy from "work units with higher bureaucratic status" (Li, Sato & Sicular 2013: 108).

The greater part of this capital is private (Figure 2.J). Private capital grew from one year of annual income in 1980 to five years in 2015. Public wealth has continued to hover around two years throughout the period. "China has ceased to be communist, but is not entirely capitalist; it should rather be viewed as a "mixed economy" with a strong public ownership component" (Piketty, Yang, & Zucman: 5).

Private and Public Wealth in China (% of national income)

Figure 2.J: Private and public wealth in the reform period.

Source: WID (2017).

While we cannot prove conclusively which *social* classes or communities the 1% and 10% *economic* classes correspond to, but we can derive some significant conclusions:

Returns to capital, which is the same as saying wealth growth, accounts for an immense part of China's inequality in its high growth period. With capital reaching seven years of national income, and with 1% owning at least two years of this aggregate, a very small economic elite has consolidated its position. Capital is generated as a form of income in a given year because capital assets multiply through investments or rents: urban housing increases in value; companies construct buildings that will yield rents for years; fortunes will be managed and reinvested by banks; and stocks in large institutions that harbor machinery and produces with numerous employees will generate wealth. Bargaining power of labor versus capitalists will become more important as China's growth rates recede.

Piketty's (2014: 25) "Fundamental Law" of capitalism is exactly the arithmetic ratio between capital growth, r, and national income growth, g. If $r > g$ holds true, and given capital is so highly concentrated, inequality will rise. The average growth of capital in China for both the 1% and 10% in the years 1996-2014 has been 3% every year. Economic growth has been about 7.9%. It is therefore *not true* that $r > g$. In this period $r < g$ with growth 2.6 times faster than capital returns (cp. Piketty, Yang & Zucman 2017: 29). This is consistent with the explanation that high catch-up growth has countered capital, but owing to capital's extreme concentration, it is still consistent with deepening inequality between individuals.

Here it is useful to draw some perspectives. In Japan before World War, $r > g$ was true at the ratio 3.5: returns to capital were 3.5 times faster than national growth rates (page 71 below). In Japan's post-war years 1950-1980 of rapid 10% growth rates, which are comparable to China's today, Japan's 1% income share stayed around 6%, although experiencing two bubbles crises, and in the past two decades, as Japan has reached Europe's income level, the 1%'s share remains at about 11%. South Korea experienced the same pattern. Japan's Gini coefficient today is 0.32 and China's well above 0.47. In 1937, Japan's Gini coefficient was about 0.50 (Minami 1998: 47). Indeed, we have to look back to the Japan and Europe of "the old world of capitalism" before World War 2 that Piketty discusses to find the extreme scale of inequality in China today. China's growth period, therefore, is unique because of the presence of extreme inequality amidst high growth. It is utterly crucial to acknowledge now that inequality in China is *not* driven by an increasingly bulky middle class of professionals with higher education profiles working in the urban sector. It is driven by the top 1% and top 10%. Inequality is not primarily driven by higher growth in the urban sector alone in comparison to the rural sector. No, China's extreme inequality is driven by the virtual disappearance of agricultural wealth and extreme concentrations of capital and housing property in the top 1% which is now primarily constituted by capitalists holding vast properties in housing, corporations, and financial portfolios. We should realize just as vividly that capitals soaring position in China's economy amidst rapid income growth rates of 8% for three decades *will never and cannot imaginably* be halted by the already declining growth rates. It is impossible that growth will solve China's inequality. There is no doubt that growth will *alleviate* inequality, to an extent. Bottom wages will rise by some measure, professional wages go up, labor productivity will be enhanced by knowledge skills, and education will spread to lower classes. But growth will not stop economic elites from further consolidating their positions. Their properties will be inherited within their families. In Piketty's (2014: 571) words:

> The entrepreneur inevitably tends to become a rentier, more and more dominant over those who own nothing but their labor. Once constituted, capital reproduces itself faster than output increase. The past devours the future.

Is Naughton's appraised account of China's economy and the Kuznets-based neoclassical economics, then, a case of myth-making? In key aspects, it is. Pre-reform China was described with the historical myths of egalitarianism in a hierarchical and repressive society and of Maoist isolationism. Post-reform China's rising inequality is falsely described as a gab in human capital where professionals from higher education living in an urban economy that simply outgrows agriculture when in fact capital concentrations in the 1% yield a many times more powerful quantitative explanation than middle class income growth. These ideas about diverging growth rates accounting for inequality in developing economies derive from Kuznets' "95% speculations" about growth constituting the single most important force in reducing inequality.

2.17 China's Globalization

We return now to the bottom 50% of the inequality account. We easily analyzed how unequal the *outcome* of China's economic development has been. But that is not exactly the same as understanding which people and institutions that bear the rising production in China's labor intensive, manufacturing re-export industries who contributed to growth through employment in factories and living in housing owned by the 1%.

The basic facts are the following: 1978-2004, the share of the population employed in agriculture declined from 71% to 46%. As a share of GDP, agriculture fell from 42% to only 13%. The 100 million of China's population migrating between the countryside and the coastal manufacturing cities increased to 180 million by 2015. The service and manufacturing sector industries they entered grew from 12% to 30% (Naughton 2007: 151-155). By far the fastest growing sector is manufacturing in electronics (28% increase 1980-1995) with manufacturing in furniture, plastics, cloths, and synthetic fibers as second (20%) (2007: 331). These commodities are mostly only assembled in the coastal open economic zones where the world's largest multinational corporations—Apple, Microsoft, Samsung, Sony—then export these items. Nearly all of China's exports are positioned in global production networks. Textiles and assembled electronics was 62% of all China's exports in 2002 (2007: 395). There is good reason to argue that the main contributions were made by workers whose incomes have grown the least.

Labor scholar Lee's (2007) *Against the Law: Labor Protests in China's Rustbelt and Sunbelt* studies this in depth. The open economic zones on the eastern coast described above are the sunbelt. The rustbelt is the older, decaying and abandoned industries that spearheaded industrialization under Mao. In both regions protests are widespread. In the rustbelt's Liaoning province over 830,000 people participated in 9,559 "mass incidents" between 2000 and 2002. In the following two years, the Ministry of Public Security identified another surge in demonstrations and riots from 74,000 to 87,000 (2007: 5). These workers have been employed for decades and toiled in state factories for most of their lives since the Communist Party's take-over. They are seeing their livelihoods disappear as factories are abandoned. One worker, upon seeing the decay of his former work place, said

> Every inch of grass and every piece of steel in the factory belonged to us workers. They were out sweat and labor. People had tears in their eyes when they saw the fallen pieces of window frames left on the burnt ground. Those were state assets and these officials just squandered them. (2007: 99)

These protests are not about extreme levels of inequality but about keenly felt social disintegration in everyday life and in missing moral commitments from their superiors, as one 52 year-old female worker explains:

> We can accept inequality of income, if those who earn more are more capable or work harder. We can only envy achievement. But the problem today is the Communist Party people who use power, not ability, and that infuriates workers. Even the lowliest cadres have the opportunity to squander the wealth and assets of the ordinary masses. […] It's not that the state or enterprise leadership exploits us. We'd rather be exploited. Exploitation is much better than corruption. (2007: 93)

In the sunbelt, younger migrants constitute over half of China's total labor force. In the export city Shenzhen, labor disputes mediated through official unions and courts rose from 54 in 1986 to 13,280 in 1999. Total arbitrated labor disputes reached 45,790 in 2002 (2007: 7). In the southeast, rampant disputes and demonstrations are often about non-payment of wages or illegal wages levels below level set by Minimum Wage Law instituted in Beijing. Here the cause is not preventing the collapse of old communities and workplaces, but of employers and officials not living up to the law. A garment worker in Sichuan is among the 75% of migrant workers who have, at some point, not received wages or illegally low amounts. She tells about the bosses' attitude:

> It's an undergarment factory. She promised each worker at least 1,600 yuan per month. But since we started working four months ago, workers have gotten only two hundred yuan per month. […] I asked her why the rate was so low, and she said, "I am the boss. This is my factory. I can pay what I like to pay. It's an unregistered factory, no time card, no record of the number of hours we work on the pay slips. (2007: 166)

Factory girls, which are the majority, experience other kinds of personal discrimination and inhuman standards:

> There is no fixed work schedule. A twelve-hour workday is minimum. With rush orders, we have to work continuously for thirty hours or more. [...] The machines do not stop during our lunch breaks. [...] The shop floor is filled with thick dust. Our bodies become black inside working day and night. [...] In the factory your entire body is under his [the employer's] control. You lose control over yourself. You have to do whatever he wants you to. It's like you're sold to him. He [the boss] treats workers like machines. As long as we can earn him money, he does not care about workers' health and bodies... It's like in the old society, I give you money and you become my slave, a lesser human being. In the countryside, even if you are poor, people look down on you but still as a human being. (2007: 197)

Workers such as her may produce hundreds of garment pieces or electronic parts each week, which are then sold or exported to high income countries, but their own wages may only be enough to buy a single cloth item each week.

Women who stay behind in rural villages while their husbands migrate to production centers face other hardships. Sociologist Zhu (2015) conducted interviews with vivid examples: during farming seasons, they are responsible for sowing, harvesting, and working part-time to save up for secondary education. Living outside the reach of social services, raising children consumes a lot of energy, too. Helping them with homework, taking care of them when they are sick, and cooking meals are all time consuming labor which is wageless because a public economy aimed at raising children has not been built. Traditional marriage relations suffer as the men have to leave children and partner behind for half a year at a time.

It is easy to imagine how these protests approaching 50,000 in number each year in the 2000s could lead to incredible bargaining power if independent unions covered just a fraction of them and could coordinate their efforts across the country. As of now, these migrants which constitute such a substantial part of China's labor market, nearly 200 million today, are trapped between their original regions where they legally belong based on their household registrations and the cities where they work. This prevents them from settling, from building communities, and from obtaining social assistance and public services.

2.18 Interpretations of Globalization

The most extensive Chinese academic article about the communist party's response to globalization challenges is Dai's (2011) Analysis of Mainland China's Response to Globalization: Acceptance versus Resistance. His article poses central, relevant questions: What is globalization to Beijing? How has the ruling party reacted to the challenges? Why do Chinese power elites want to constrain globalization to economic integration while avoiding political globalization?

Globalization began, according to Dai, with the fall of the Berlin Wall in 1989. He states that this meant America remained as the only superpower.

> Because America played the key role in the final process of the Cold War, it is clear as daylight that the following globalization wave was moved by American values [美國價值]. American values in economics are capitalism's main principles of markets and competition [...] (2011: 148).

Around 1990, intellectual discussions in China focused on the costs and benefits of China's entrance into the new American-led trade regime of GATT/WTO. With the collapse of the Soviet Union, the choice stood between joining the new order or retreating into deeper seclusion. Beijing adopted a "stance of carefully observing changes" (靜觀其變態度) (2011: 150):

> because the application time for entering GATT and WTO was growing long, mainland China's leaders again began considering whether the cost of entering would exceed the gains. Many bureaucrats also began complaining that China should not abide by the rules established by the hegemon (霸權) [...].

But when the Asian financial crisis broke out in 1999, the winds shifted decisively towards integration.

> What really impelled mainland China to actively adopt the entrance rules of open inner markets happened in early 1999, which was after the time when [national] leaders fully recognized that a negative response to globalization would also mean not finding a substitute plan for preventing another Asian financial crisis from breaking out.

Beijing therefore ended up "fully embracing economic globalization" of trade and finances. But the ruling party remains committed to resistance against democracy and a society open to information. Dai (2011: 148) proposes a sharp contrast between "Americanization and capitalism" and China's "implementation of a socialist system with Chinese characteristics." He argues that Beijing's resistance to globalization is glimpsed in worsening popular nationalism, which the state used information propaganda to infuse in order "to solve the ideological crisis when Mao Zedong's beliefs were weakened" (153). To protect its propaganda apparatus further the new Ministry of Industry and Information under the State Council imposed a law, from which private corporations were eventually excepted, that all media houses and schools must "preinstall filter systems against harmful Internet content" (151). Strengthening his argument of a great power struggle, he compares the "Washington consensus" and the "Beijing consensus" in economic theory. The former is an international order based on deregulation of capital movements while the latter maintains that the state must take responsibility for establishing stability. After the 2008 financial crisis he (2011: 158) claims the "China model" (中國模式) is rising to become a challenger to American globalization as a model of "socialist modernization" that mixes markets and state intervention.

Dai's entire article should be understood from within the framework of great powers struggling to spread their Cold War ideologies to the world: "China, as the developing countries' great power, bears the responsibility of speaking on behalf of the third world. Itself facing the challenges of globalization, China naturally adopts a reluctant stance as response" (2011: 155-156).

The leading Chinese academic who studies globalization is Zhang from The Chinese Academy of Social Sciences. He (2007) publishes extensively in the journal *World Affairs* (世界知识) and is editor of *Globalization and China's Development* (全球化与中国发展). In his analysis, globalization is shaped by five changes in the world system: (A) the fall of the Berlin wall, (B) magnification of global challenges, (C) developments in information technology, (D) "universal use of international rules" (国际规则普遍通用性), (E) and changes in the world system (世界格局).

(A) *The Berlin Wall's Fall.* With the collapse of the Soviet empire and its international reach, "the noneconomic obstructions to economic activities were gradually abolished, the degree of economic cooperation and mutual dependence deepened, and the conditions for founding a unified world market were established" (2007: 4-6). 1990-2000 saw a rise in foreign direct investments around the globe from $200 billion each year to $600 billion.

(B) *Global Problems.* The environmental challenge is that the developed world and China are exploiting the environment beyond the earth's sustainability (2007: 11). The economic challenge is financial: the "preservation of the American dollars long-term hegemony (霸权)" requires "a stable supply in order to safeguard its strength," or the world could fall into recession (2007: 12).

(C) *Information Technology.* In the 1990s, information technology started constituting a substantial part of the high income economies:

> Compared to traditional machine manufacturers or agricultural workers, information industry workers' schedule, location, surroundings, and method of measuring service are all fundamentally different. Information industry employees are particularly free from geographical constraints which is an enormous advantage. (2007: 16)

(D) *International governance*. The division between the Soviet planned economies and the market economies disappeared. China therefore has to implement domestic market reforms to enter the world economy:

> That the market is the fundamental method of allocating resources has become common sense, but within central planning systems the purpose of proportionality and balanced growth has also become a part of the new economic order when the two great systems [of the Cold War] merged […] Communism and capitalism, the two great ideologies, may maintain opposite core concepts and even existing differences, but this does not mean that they cannot, at a technical and operational level, mutually link up and share rules. (2007: 21)

Zhang (2007: 23-4) argues that markets are in theory a way to make capitalism more efficient, but that in reality they are interfered with constantly:

> market principles are clearly a way to strictly protect property rights, free competition, and maximization of profits by implementing clear rules and connecting every corner of the earth so that resources will be beneficially deployed. […]
>
> In truth, market mechanisms are feeble; as they are turned into rules at higher levels, the threat that ruleless attacks leading to disorder increases. […] All this essentially reflects that the group of key states [关键国家集团] who enforce the so-called market economy and liberal democracy standards have a deep fear of non-market rules and behavior. (2007: 23-24)

2.19 Discussion

The Chinese language literature on globalization is characterized by the theme of China's "socialist system," representing order and developing countries, struggling against the Western high income countries' "market institutions." If we take growth as the cornerstone parameter to measure and describe a society's "model," then this struggle can easily be overestimated. Growth rates are not declining but remaining constant in Europe and America. As Figure 2.K shows, it is true that income growth in Japan and China is starting to constitute a good share of world income, from about 10% in 1950 to 45% in 2015. Europe and America's share has declined somewhat from roughly 68% to 45%.

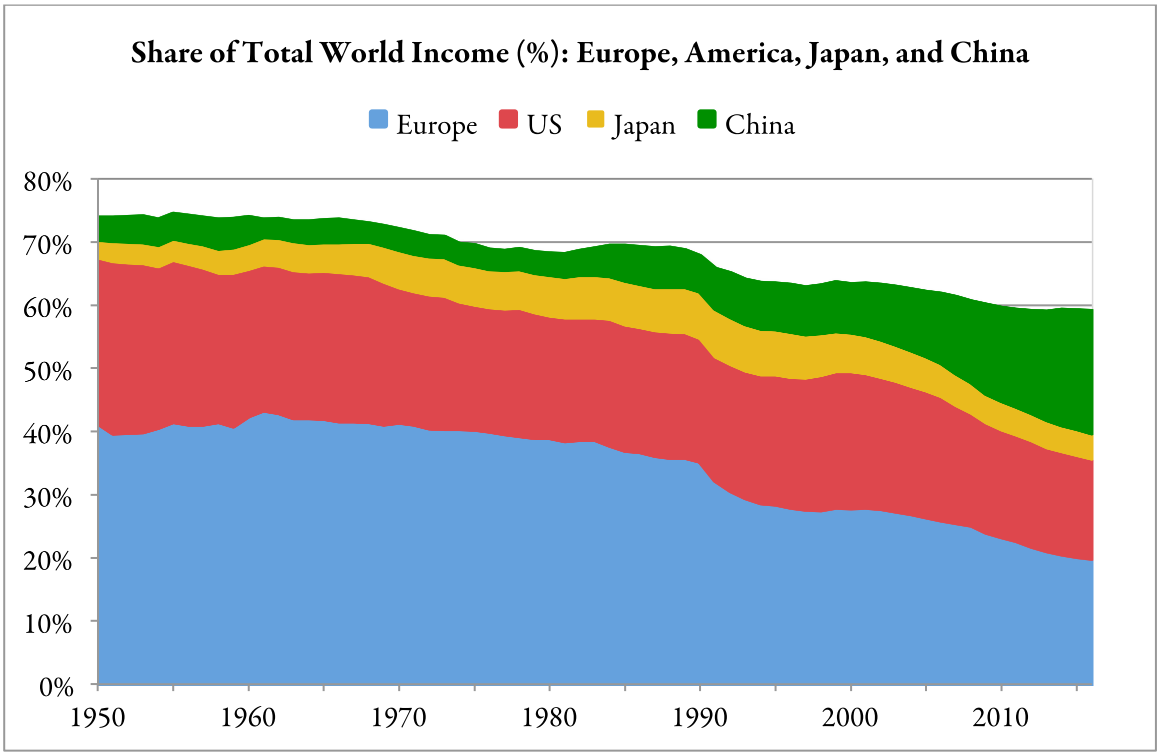

Figure 2.K: Europe, America, and Asia's Share of World Income, 1950-2010.

Source: WID (2017).

However, this does not mean that Europe and America have declined in any way except that their growth rates have converged to 1.5% and therefore not grown nearly as rapidly as Asia. Figure 2.L shows exactly that: in spite of its declining share of world production and income, Europe and America still receive, in absolute numbers, more than China and Japan combined and none of them have experienced anything resembling collapse.

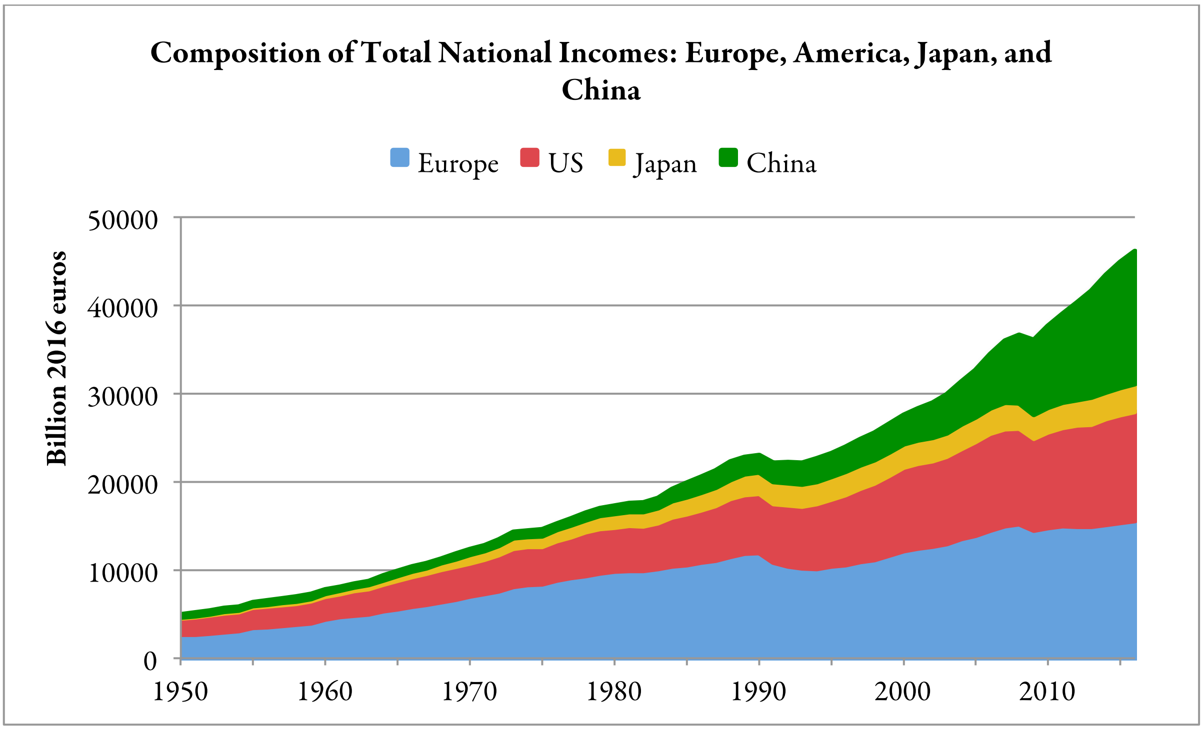

Figure 2.L: Rising Global Incomes in Asia, US, and Europe.

Source: WID (2017).

In spite of the widening gap between labor and capital, economic development in Asia has undoubtedly spread material well-being and dramatically reduced global inequality in a long historical perspective. But it is also a fact that labor wages have not only stagnated but declined in the US since the 1980s and that China's inegalitarian growth is causing the bottom 50%'s share to decline. Bourguignon's (2015) *The Globalization of Inequality* concludes exactly that China's "reserve army" of migrant labor has disadvantaged labor in open economies with weak social safety nets and with large multinational corporations, such as the US. Corporations have moved production to China's open economic zones where labor costs a small fraction of its value in the developed world. China's "miraculous growth" rates since the 1990s is evidence that the world system is disadvantaging labor and encouraging states to undermine labor rights in order to attract foreign capital (Rodrik 2011). We must repeat, however, that this has not truly caused national growth to really decline in the high income countries. It has primarily encouraged governments to implement reforms that attack labor incomes and harm equality. In spite of the many institutional differences, the extreme inequality levels in America and China have in common the rise of the 1% and the relative decline of the bottom 50%, reflecting how the two states favor capitalists and disfavor labor—a key similarity between the two, but a crucial dissimilarity to the equally successful economies of Japan and Europe. If we adopt inequality, the strength of labor, or welfare state development as the key evaluation criteria for our "models," not market institutions, growth, or democracy, America and China's globalization are surely partners of the same convictions rather than mortal enemies.

Part 3: Comparison with Japan's Course of Development

We dedicate the final part of this study to looking closer at what happened in Japan leading up to World War 2. This is reasonable because we already refuted, again and again, the idea that growth has reduced extreme inequality in Japan and Europe's past. Growth and market reforms therefore is unlikely to do so for China either. To convince ourselves how incredible the institutional changes necessary to reduce extreme levels of inequality are, pre-war Japan is useful as a historical example functioning as a substitute for the sea of speculative hypotheses.

3.1 The Meiji nation state

The Meiji Restoration of 1868 was less a one-sided "modernization" story of a new regime planting the first seeds of future development and more an elite revolution that built upon substantial economic developments of the late Tokugawa period (Macpherson 1987: 24). Relevant to our topic of rising inequality is the new institutional hierarchies that contributed to further concentrations of economic power. Most strikingly, the Meiji Restoration was a "revolution from the top" (Lockwood 1968: 505) whose circle of victorious leaders ended the reign of local lords and took from them the key prerogative of eliciting taxes from the peasant population cultivating Japan's previously fragmented domains. Policy jurisdiction was transferred to the central state. The Meiji period therefore saw the consolidation of a national bureaucracy in the already emerging urban center of Tokyo. Powerful Tokugawa merchant families would continue to expand their wealth in the following decades. The major administrative reform (Gordon 2003: 64) was establishing a nationally unified tax system based on credit payments by each individual following market prices. This reform tied the agricultural economy closely to powerful urban centers and made it susceptible to administrative initiatives and market speculation.

Until the 1880s, Japan was still predominantly an agricultural economy. 72% of the population was employed in agriculture and 90% of state revenues derived from agricultural land taxes (Minami 1994: 258). The state taxed this large and developing resource base, channeling resources into incipient urban industries. This tax innovation imposed by the Meiji bureaucracy laid the foundations of a regressive taxation structure: as industrialization proceeded, the burden was barely shifted on to industrial growth sectors, which also used poor migrant labor from the countryside (Lockwood 1968: 521).

3.2 Labor Activism

In the 1880s, at the eve of Japan's industrial take-off in manufacturing, peasants families were subjected to the new administrative state's attempt at establishing a currency economy. The pressure on public finances caused by expenditures for suppressing revolts and building infrastructure in the 1870s was met by printing large amounts of money, causing high price inflation. Finance Minister Matsukata responded to the situation by implementing severe deflation policies. Almost over night, rice prices declined by as much as 50% (Ericson 2014). These deflation policies created a spiral of inequality in which peasants became indebted to meet rent and tax payments, often having to give up land ownership and urge their children to take up work in the urban factories to earn desperately needed additional income. These events therefore linked up with the tremendous reorganization of labor taking place during Japan's industrial take-off around 1886.

Japan's early industrialization was based primarily on textile manufacturing. Between 1876 and 1900, the agricultural sector's share of employees fell from 78% to 65%, then to 51% in 1920 (Moriguchi & Saez 2010: 86). By 1909, 500,000 Japanese were employed in textile manufacturing. With 50% of total national exports consisting of textiles, the sector accounted for 60% of all growth until 1938, with 4.5% annual growth rates (Minami 1994: 98). No less than 85% of this workforce was female, and nearly all of them were peasant daughters in their late teens (Patrick 1976: 59).

According to labor scholar Tsurumi (1990), factory compounds in these decades were institutions of social control. Because urban residents knew about the degrading and miserable conditions, factory owners were forced to recruit girls from rural regions where fathers, hard pressed by debt, forced their daughters to become textile hands. Locked inside fences under guard for entire weeks, the living quarters of factory dorms were tightly packed with small sleeping pads and inadequate bathing facilities having "more in common with a prison" (Yamamura 1997: 256-261). Small portions of bad quality food served every day was a major reason for flight and caused malnutrition. A death rate of 9% was probably normal. Working twelve hours a day, cotton hands were also forced to work demanding night shifts every second week. The result was a turnover rate of 100%. Whereas Sen (1999: 153) has rightly described Meiji Japan as the "pioneering example of enhancing economic growth through social opportunity, especially in basic education," Tsurumi argues that only 10% of the girls in this productive heart of textile manufacturing were literate. She argues (1990: 98) force was necessary to make people change their way of life, as worker songs testified: 'Factory work is prison work. All it lacks are iron chains.' In these decades before World War 1, corporations had additional state-like functions. Factory owners formed wide-ranging organizations such as the Yamanashi and Suwal silk employers' alliances who wrote legislative treaties giving themselves the right to fire employees without constraints and to unilaterally set and withhold wages while making it compulsory for workers to stay at the same company for a year (Tsurumi 1990: 49, 74). Police forces assisted employers as strike-breakers and labor unions were officially illegal.

Patrick (1976: 256) reports that females' wages barely rose, from 18 *sen* in 1989 to 22-31 *sen* in 1914. Over three decades, then, wages changed very little from a very low starting point. Minami (1998: 49) affirms that the "declining trend" in labor's national income share was matched by an increasing trend in inequality. The unequal degree of power and organization between labor and employers, mirroring the economic hierarchy of property owners and low-wage labor, contributed to a rising disparity in income.

After World War 1, social unrest and labor unionizing became a major movement in Japan. The urban labor organization Friendly Society founded in 1917 grew into the largest union, the Japan Federation of Labor. Closely studied by Gordon (1991) and Garon (1987), the rapid proliferation of labor movement organizations was based on widespread protest against the injustices of rising inequality and against lacking acknowledgement of labor's contribution to the economy. The fact that in Nankatsu, Tokyo's principal industrial center, union membership grew from 1-2% to 32% of the local labor force between 1912-1929, reaching probably 7.9% on a national level, is testimony to the vitality of protest and community-building in an environment where unions were still formally illegal (Gordon 1991: 186). Union proliferation mirrored a trend in disputes between workers and employers which rose from 500 to 3,000 incidences in all of Japan in the 1920s. This movement undeniably produced impressive victories for social progress: In 1922, women won the right of freedom of association and free public speech. In 1925, universal male suffrage was implemented back when in 1908 only about 47,000 qualified to vote in elections. A year later, a Diet bill legalized labor disputes. In 1928, night work by women and children was prohibited by law. At labor's peak strength in 1931 following the Great Depression, the lower Diet, flanked by socialist parties growing from the roots of the urban proletariat, even managed to pass a bill to legalize unions, but the law was stopped indefinitely in the upper Diet.

3.3 The Japanese pre-war economic elite

Each step of reform taken toward social and political equality by labor and parliament in the 1920s was not enough to create a corresponding process of progressive redistribution and greater income equality.

We saw in Figure 1.B (Part 1) that the 20% of national income share taken by the 1% did not undergo enduring decline until the year 1937. In fact, income was relatively *equally* distributed compared to wealth, capital and property which accumulated rapidly through the 1920s. Moriguchi & Saez's (2010) account of Japanese estates—the properties inherited within the wealthiest families—begins with data from 1905. In Figure 3.A below we observe the evolution of capital concentration among these rich families. The wealthiest 5-1% were families of substantial wealth compared to the rest of society. Their assets maintained values floating around 10-20 million yen through to the 1940s. But even this minor wealthy class did not truly participate in Japan's pre-war decades of rapid economic change. The rise and fall of wealth is more strongly pronounced in the realm of the dynasties in the 1%. Their fortunes grew from 40,000 million yen in 1905 to a peak of over 250,000 million in 1936. The evolution was towards ever higher inequality, with a precipitous but temporary decline during the Great Depression, with a lasting fall not occurring until the beginning of World War 2 around 1938, the very same year when income inequality dived. According to an Imperial Cabinet Bureau of Statistics study in 1930, total wealth amounted to as much as ten times national income (Lockwood 1968: 238). The consequences this inequality had for economic development are immense. For the entire nation, the average annual growth rate reached 2.1% between 1905-1936 (Maddison 2003: 180-182), but capital grew at a faster rate of 7.4%. This is consistent with Piketty's (2014: 25) 'fundamental inequality' of capital growth exceeding income growth, here at a rate 3.5 times faster.

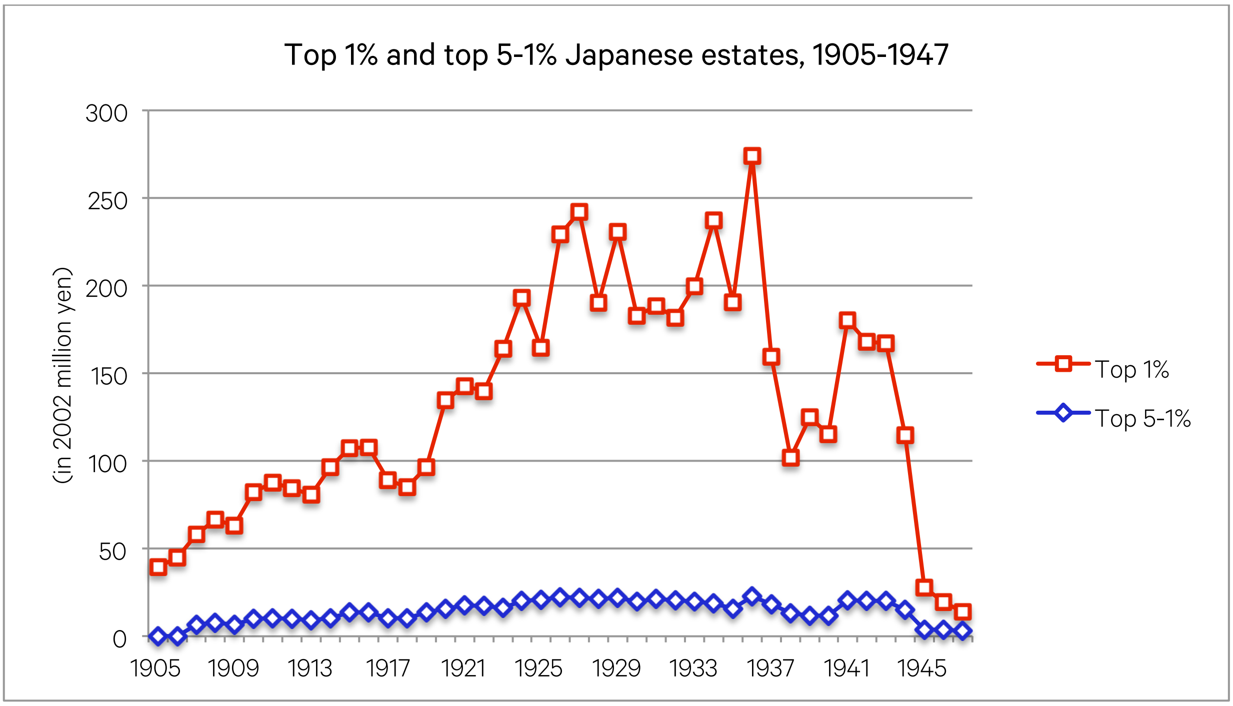

Figure 3.A: The top 1% and top 5-1% of the Japanese wealth scale from 1905 until World War 2.

Wealth inequality remained anchored primarily in the property of Japan's 1%. Their fortunes surged upwards especially after World War 1 and did not decline until World War 2 policies were implemented in 1937.

Source: Moriguchi & Saez (2010: 147-8).

The realm of the Japanese capitalist aristocracy is well-known. Throughout the 1920s, *zaibatsu* conglomerates grew and expanded their power (Minami 1994: 114). Reflecting traditional aristocratic values, the Japanese estate was organized around patriarchy with a dynasty head owning the bulk of family wealth while also holding authority in overlapping board memberships in corporate and banking branches of a conglomerate. When possible, these positions and assets were inherited to the first-born son. In figure 3.B, the composition of these estates are delineated further. Even by 1935, waste agricultural properties and residential land (34% of wealth) were core sources of income in the form of rent paid by tenants.

Here, in the 1940s, Kuznets's ideas about the decline of the 1% are slightly more appropriate. As the industrial economy overtook agriculture, landlord wealth based on rent transfers from tenants would in fact decrease. But overall inequality did not fall because because new capital concentrations emerged, many times more powerful. This is another hit against believing Kuznets's hypotheses in China today where agricultural land ceased to be valuable already with the redistributions in the 1940s.

With the new capital economy, large amounts of financial capital had concentrated simultaneously. Before World War 2, financial assets constituted as much as 52% of estate wealth. When wartime legislation was initiated in 1938, their value declined rapidly to just 17% by 1950. Inflation after defeat took care of the rest.

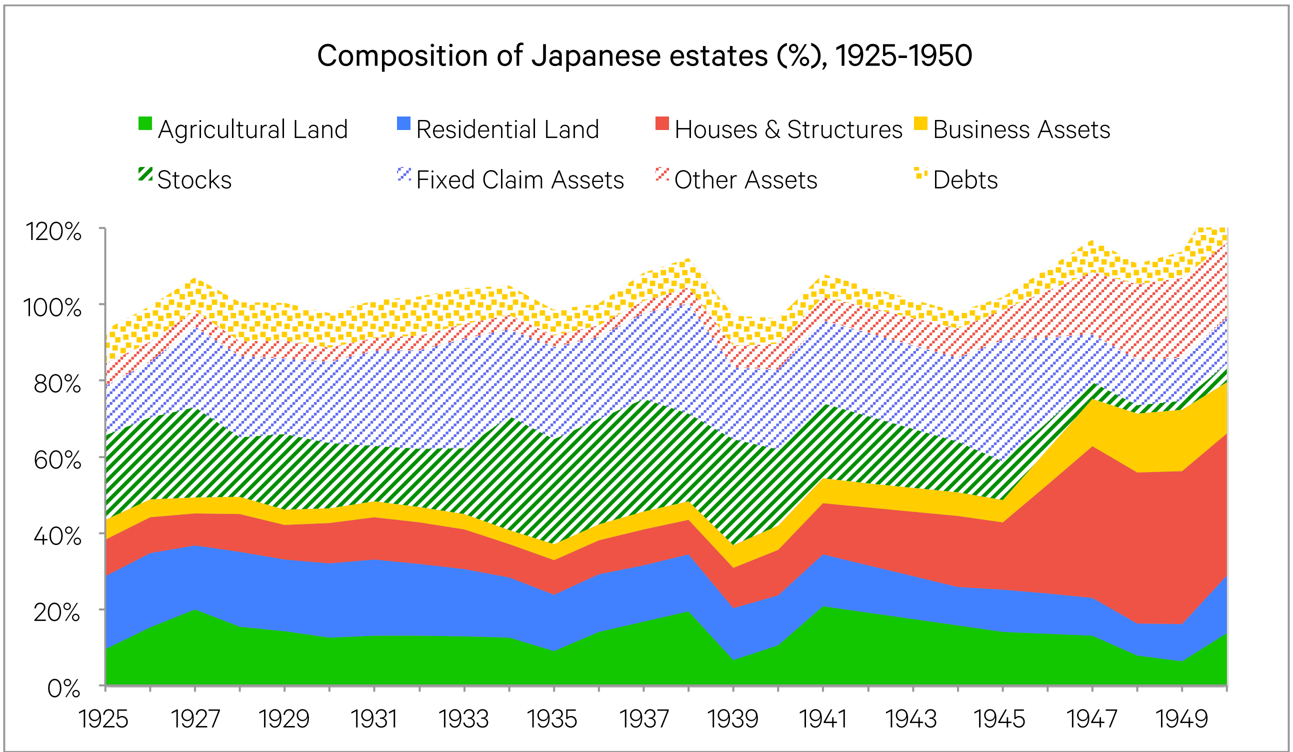

Figure 3.B: Composition of Japanese wealth, 1925-1950.

Both agricultural and residential property remained key sources of wealth and rental income until the 1940s, but financial assets constituted as much as 50% of total wealth in 1937. Half of all financial capital vanished during the years of war preparation.

Source: Moriguchi & Saez (2010: 151)

3.4 The Fall of Inequality

Labor activism and repeating social crises in the 1920s and 30s made for vivid evidence to Japanese affluent circles that society and economy were dysfunctional. In the military and state administration, bureaucrats held an "obssessive fear [...] that domestic society was collapsing' (Gordon 1991: 10), and groups of increasingly radical bureaucrats "believed that radical policies to nationalize industries, control private property, and thereby eliminate popular discontent were essential to national defense" and "to reduce the tremendous gap between the rich and poor" (1991: 279). Even during the "reform bureaucrats' " rising influence over state organs, some members of the 1% estates would enter the national administration as bureaucrats and ministers (Johnson 1982: chapter 4). These infamous *zaibatsu* leaders intertwined state and corporate power but as a minority—among the 0.01% highest income earners only 3% were affiliated with *zaibatsu* conglomerates—they did not represent a unified, preponderant ruling class.

The wartime governments implemented an array of unprecedented social reforms to bolster the nation's war mobilization and to establish social stability. It regulated and standardized wages across industries both in the top and bottom, it mandated workers' councils in factories to empower state-governed unions, and it put a ceiling on executive wages and interfered in management. The regressive tax system was finally turned around with the imposition of ever heavier taxation on corporate and rental income each year after 1938 while land was redistributed from property owners to tenant farmers and rice prices fixed. In the stock market, war bonds replaced generous state obligations, cancelling a major rental income for capital (Moriguchi & Saez 2010: 101). This drive for legislation was forcefully implemented beginning in 1938, when both income and wealth inequality fell to its lowest levels ever.

Japan's defeat ended in two years of extreme inflation and hunger. Heavy fire bombing runs in all urban centers destroyed capital in infrastructure. The economy was not revitalized until the outbreak of the Korean War in 1950. In these years, labor unions became stronger than they ever were in the Great Depression, growing in membership to encompass 50% of Japan's entire labor force (Gordon 2003: 230-231). With capital decimated, the economy in crisis, and labor actively expanding, the origins of Japan's welfare institutions were made possible. Corporations offered generous benefit programs to core employees in the conglomerates, which became the pillar of a secure family structure (Esping-Andersen 1997; 1990).

3.5 Conclusion: Inequality & Development

Since state-building began in the Meiji Restoration era, both fast growth rates and high income inequality emerged. The new government established a regressive tax system that transferred income from lower classes in the agricultural economy to urban centers. Progressive taxation on the 1% was not imposed until World War 2 exigencies forced state actors to challenge capitalists. Young women workers migrating from the countryside contributed by far the largest workforce to the fastest growing textile industries, but their incomes rose only slowly. Traditional cultural patterns of primogeniture and repression of young women exacerbated inequality both at the top and bottom.

The 1%'s overshadowing dominance in both national income and wealth did not decline gradually as the consequence of labor's empowerment or social rights legislation over the 1920s-30s. In fact, especially wealth inequality rose to its highest levels ever in 1936 when legislation supportive of labor activism was halted. These rights movements, however, influenced the dramatic policy shifts in subsequent decades by making it imperative to confront capitalism's hierarchies to ensure social stability. The key year of decline in economic inequality remains 1938 when Japan committed itself to fighting in World War 2 and implemented legislation that reversed the trends of worsening inequality: for the first time since the Meiji Restoration, tax contributions were shifted from rural areas onto urban economic elites, including the crown of capitalist aristocracies as a wave of wartime bonds and agricultural redistribution cut pieces off property concentrations. With hyper inflation, the 1%'s financial assets vanished between 1940-1949.

In Johnson's (1982) classic theory of Japan's developmental state, economic inequality is given less weight than warranted. He (1982: 147-8) assesses that the wartime policies that fixed all prices, wages and rents were ineffectual: "all this did was eliminate the last traces of realism in the price structure and reinforce tendencies toward budgeting in terms of commodities." His work unfortunately does not argue carefully how a weakened and decimated system allowed Japanese to build a more egalitarian post-war "developmental state."

3.6 Final Conclusions

Our final conclusions are these:

- *In the past, extreme levels of inequality were only reduced by historical events and major institutional reforms.* When the 1% receives about 20% of income and owns 30-70% of national capital, inequality has only been reduced by strong policy interventions, progressive taxation, wartime destruction, hyperinflation, and a strengthened civil society.

- *Even in a developing country like China experiencing rapid annual growth rates of 8%, extreme inequality can emerge.* China's growth will decline toward the global average and the 1%'s capital clusters yielding rents stronger than national growth. Unlike Japan's post-war high growth decades in which egalitarian growth made Japan reach Europe's national income level, China's development course is comparable to Japan in the 1930s and perhaps the US today.

- *Markets will never substantially reduce the levels of inequality in China today, just as growth never will.* Only a combination of progressive taxation or destruction and revolution, civil society mobilization, independent unions, and welfare and social programs will take China down to inequality scales comparable to Europe or Japan.

- *Kuznets hypotheses must be laid to rest in the realm of mythology.* Growth will alleviate inequality somewhat, but the strong constitution of capital concentration even during rapid growth periods will exacerbate inequality at a faster pace. Given China will reach the technological frontier, there is no reason to believe that capital property will decline as agricultural property did during earlier industrialization.

- *In the past, the party-state destroyed independent unions, created state registration systems based on employment and unemployment, and repressed civil society to exacerbate economic inequalities.* These totalitarian institutions are still at work today, have worked during the high growth period, and may, against the core party's intellectual supporters, continue to entrench itself. No matter what, liberating migrants may alleviate but not reduce inequality significantly.

Our discussion also yields theoretical perspectives:

- *Would Europe and Japan ever have imposed progressive taxation if not for the outbreak of World War 2?* Would states in the 1930s even have had the *power* to tax capitalist elites if the global financial system had not ultimately collapsed? Would Japanese bureaucrats have been able to establish high growth institutions and egalitarian growth between 1950-1970 if the capitalist dynasties and their conglomerates had not been weakened during the war? Is China's party today too enmeshed in the top 1%'s special interests to ever become independent enough to challenge economic elites? Will there emerge a global consensus in the UN and other international organizations that global taxation and welfare state expansion must become the aims of the 21st century?

- *Only institutions and historical events cause rising and falling inequality, not growth.* Nearly all the literature on Chinese development is strongly characterized by the *false neoclassical belief that growth fosters equality* and the unrealistic and hypothetical idea economies dominated by markets tend to work well and even provide progress for everyone. This assumption is false, derived from an impoverished understanding of history and ignorance of the dimensions of inequality. The primary agents of rising and falling inequality are institutions and historical events. Economists refusing to participate in social science research, therefore, are forced by reason to abandon studying inequality. At its heart, development scholarship must account for these ties between institutions and economic growth.

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