# From workers to capitalists in less than two generations: A study of Chinese urban elite transformation between 1988 and 2013

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From workers to capitalists in less than two generations:

A study of Chinese urban elite transformation between 1988 and 2013

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#### **ABSTRACT**

Economic and social transformation of China during the past 40 years is without precedent in human history. While the economic transformation was extensively studied, social transformation was not. In this paper, we use for the first time harmonized household surveys covering the period 1988-2013 to study the changes in the characteristics the richest 5 percent of China's urban population. We find that the elite changed from being composed of high government officials, clerical staff, and workers in 1988 to professionals and small and large business owners in 2013. The educational level of the elite increased substantially. Membership in CCP has a positive (albeit small) effect on one's income but is particularly valuable to large business owners.

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#### Section I. The objectives of the paper

The transformation of China from a poor and egalitarian country to an upper middle-income country with the level of income inequality greater than in the United States has been the subject of innumerable publications. The Chinese transformation is a unique event in world economic history: never have so many people over such a relatively short period of time increased their income so much. China's GDP per capita in 1978, at the time of the initiation of rural reforms, was about \$1,500; by 2015, it was more than \$12,000 (both in constant PPP dollars).<sup>2</sup> For comparison, UK GDP per capita was (expressed in the same units) around \$12,000 in 1953, while its GDP per capita at the beginning of the Industrial Revolution is estimated at more than \$3,000. <sup>3</sup> Thus it took UK about a century-and-half to increase its GDP per capita by half as much as China did in less than 40 years. Differently, it took the United States 240 years from approximately year 1700 (when its GDP per capita was estimated to have been \$1200-\$1300) to 1941 to reach \$12,000 and thus to do what China accomplished in forty years.<sup>4</sup>

Such transformations, in terms of average income and distribution of that income, is only superficially captured by synthetic indicators like GDP per capita or the Gini coefficient or the share of the top 1%. The experienced social changes were much deeper (*changement en profondeur*) and affected all social classes. Clearly, the England of 1953 was, socially speaking an altogether different country than the England of the Napoleonic wars. So is today's China compared to the China of 1978. For social researchers, the advantage of the Chinese experience is that the change has taken place so fast, in the span of less than two generations, so that it

<sup>&</sup>lt;sup>2</sup> Data from the 2018 update of the Maddison Project Database.

<sup>&</sup>lt;sup>3</sup> To find the date when the UK GDP per capita was only \$1,200 would require going back into the later Middle Ages for which the data are quite uncertain. Maddison's numbers for the Great Britain for year 1000 give \$1100; the next value is for the year 1700: \$2200. If the UK had reached the level of \$1,200 by (say) approximately 13<sup>th</sup> century, it would have taken the country six centuries to traverse the path that China traversed in some 40 years.

<sup>&</sup>lt;sup>4</sup> Maddison Project Database 2018 update. Available at https://www.rug.nl/ggdc/historicaldevelopment/maddison/releases/maddison-project-database-2018

can be more easily apprehended, and that the data to assess it empirically exist today while they were lacking during the similar episodes in Western economic history.

The objective of this paper is to describe and analyze the change in the Chinese economic elite between (approximately) the years of early reforms and the attainment by China of the status of the largest economy in the world (in PPP terms). We are interested in how the composition and characteristics of the top income group in the urban area have changed during that period. A common view is that the Chinese society in the late 1970s-early 1980s was poor but very egalitarian: income differences between different segments of the population (workers vs. cooperative farmers; town-dwellers vs. villagers; Eastern provinces vs the Central and Western areas) were relatively small. A number of studies documents low levels of income or wealth inequality across any of these criteria (Kanbur and Zhang, 2018; Zhuang and Shi 2016; Ding and He, 2018; Wu and Perloff 2008).

When we focus on the pre-reform elite we might distinguish, within the picture of an overwhelming equality of income and condition, only a very narrow sliver of top government and party officials whose incomes<sup>5</sup> and standard of living were much higher than that of the rest of the population. But the Maoist elite was very small to make a serious dent in any picture of overall equality which, by definition, takes into account the sum of all income differences between all members of a community (the Chinese nation in this case).

Moreover, the period of Dengist reforms when the transformation of the country began, was preceded by probably the most egalitarian movement in Communist, and possibly in world, history. The Cultural Revolution that is conventionally dated from 1966 to 1974 not only aimed to reduce the privileges of the top Party cadres ("bombard the headquarters [of the Party]" according to Mao Zedong), to proceed to an overwhelming replacement of the elite, to "exile" many intellectuals to the countryside and submit them to the manual labor, but implemented an extreme version of "the affirmative action" that openly and hugely favored, in terms of access to education and better jobs, children of poor farmers and workers. Thus the usually

<sup>&</sup>lt;sup>5</sup> But not necessarily wealth—since very little of amenities they enjoyed could be transferred to the next family generation.

egalitarian character of socialism was additionally exacerbated by this most radical experiment in social leveling.

It is against this background of egalitarianism, and of an elite that was probably composed of a small number of top party and government officials, who themselves were subject to fast rotation as their fortunes during the Cultural Revolutions and afterwards quickly altered, that we ought to evaluate the transformation that has occurred in China. Section II reviews two types of literature relevant for our paper: the one on social classes and their transformation, and the other on elites.

The household survey data that we use cover the period from 1988 to 2013. We have four waves of household surveys (Chinese Household Income Project, CHIP) conducted in 1988, 1995, 2002, and 2013. We have standardized them so that they are almost fully comparable (see Section III).

As mentioned, the objective is to study the change in the composition and characteristics of the Chinese elite. We define the elite as the top 5% of the urban population in terms of their per capita disposable (after-tax) income. We include only individuals aged 20 years or more. We decided to focus primarily on the top 5% rather than on the top 1% because the latter is too narrow a group. It is also unlikely to include the very richest members (say, the top 0.1%), whether they are top party officials or capitalist entrepreneurs. This is not only because the participation rate of the richest households may be low but also because their numbers are relatively small to be captured by random surveys (that is, short of surveys trying to oversample the rich).<sup>6</sup> The term "elite" unless further clarified will be used for the top 5% only. At times, when relevant, we study the top decile and the top 1% as well. Our description and the analysis of the elite is presented in Section IV.

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<sup>&</sup>lt;sup>6</sup> This is one of the reasons why American Current Population Survey in the past used to proceed to top-coding of income so that sudden inclusion of very rich people may not lead to misleading ascription of excessively high inequality to the year when they were included in the survey. An alternative, initiated recently, is to try to oversample the rich.

An important feature of Chinese developments is a significant, and perhaps increasing, split between the more advanced and richer Eastern (Pacific Rim) provinces and those in the Center and the West. The survey data allow us to include the regional component in the study. The regional component is especially important in a study of the elite because one may expect that the composition of the elite had evolved differently in different parts of the country: richer and more advanced parts might have developed a more capitalist-entrepreneurial elite than the less advanced and poorer regions. We explore this aspect in Section IV as well.

The Chinese household survey data are unique in that they also include a personal political variable, namely membership in the Chinese Communist Party (CCP). Since CCP was the ruling and de facto the only political party in China throughout the period of our study, and its members might be thought to have enjoyed, both in the past and more recently, special economic advantages, we study empirically the role of party membership in Section V. Section VI presents our conclusions.

#### Section II. Related literature

This paper is related to several strands of literature. Our first contribution is to chart the changes in the social structure during the 'great transformation of China' in the last several decades. Obviously, we are not the first to look at this process. There is a large literature both in China and abroad that explores the ongoing social trends and implications of the rapid economic development in China (see Bian 1996, 2002; Brandt et al. 2008; Lin and Wu 2010). More specifically in this broader area of research, we see our work as a natural extension of the literature looking at the relationship between the (changing) social structure and income inequality.

This allows us to place the recent social transformation in China in the historical perspective and to draw comparisons, principally with Western countries. While this

<sup>&</sup>lt;sup>7</sup> Several surveys conducted in former socialist countries in Eastern Europe included a personal political variable on the membership in the Communist party (for example, the Czechoslovak Social Structure Surveys). But, to the best of our knowledge, this dimension has never been systematically investigated.

comparison is not the object of the current paper, the data and the analysis provided here make such comparisons an obvious topic of future work. The Chinese transformation seems to have exhibited similar tensions between economic and social demands typically attributed to the western industrialization (e.g. Polanyi 1944). But it was compressed in time due to the extraordinary high rate of growth of the economy. To illustrate. According to social tables for England and Wales reworked by Allen (2017), it took British capitalists 180 years, from Gregory King's 1688 social table to Baxter's social table in 1867, to increase their share in the population from 3.4 percent to 7.8 percent. For urban China, however, we find that small and large capitalists (including the self-employed) increased from less than 1 percent of the population in 1988 to 12.3 percent 25 years later.

The relationship between social classes (both by their size and income) has figured prominently in analyses which has looked at how social relations of production—typically of asset ownership and authority—influence income inequality (Dahrendorf 1959, Wright 1979, Wodtke 2016, etc.). There are compelling reasons why this framework is especially pertinent to analyze the great transformation in China. Officially, "class" labels were introduced during the Mao's era with the clear intention to predetermine social prospects of individuals. The labels were intended to reflect pre-1949 class relations. There were "five bad elements", landlords, rich peasants, counter-revolutionaries, bad elements (in general) and rightists, and "five red categories": workers, peasants, cadres, descendants of revolutionary martyrs and revolutionary intellectuals (see Goodman 2014). In a form of extreme affirmative action, the "five bad elements" and their progeny were to be discriminated against, and the "five good elements" and their progeny to be discriminated in favor. While such labels are no longer used, and do not openly lead to advantages and disadvantages, social classes and social structure matter in China, both officially (this is why a statistical count of classes is maintained) and in terms of what society the modern China is.

China saw at the same time a rapid transformation of the class structure and a substantial increase in income inequality (see Lin and Wu 2010; Lu 2002, 2004, 2010 etc.). Hence it is legitimate to ask whether these developments are related and to what extent the social class is a determinant of income inequality (e.g. see Wodtke 2016 for a related analysis

for the US), and *vice versa*, to what extent has rising inequality been an important determinant of the class identification (Goodman 2014).

The global shift of the industrial production to China in recent decades has entailed a thorough modification of the social relations of production in the country, both along dimensions of ownership and control over productive assets. There has been, on the one hand, a dramatic change within the working class, with the massive rural-urban migrations and rapid proletarianization amid dissolutions and privatizations of the state-owned enterprises. On the other hand, altogether new classes emerged, most notably that of private, often big, owners (see Lin 2007, 2008; Liu 2007; Lin and Wu 2010). Similarly, the importance of professionals, working either in state or private sectors, increased.

Therefore, the social class analysis—by considering some unique features of the contemporary Chinese society—provides a more comprehensive approach to study the distributional implications of China's movement toward capitalism. The approach is thus complementary to the more frequently studied functional distribution of income between capital and labor, which has traditionally been a concern of economists. <sup>9</sup> <sup>10</sup> In addition, the class-based framework implicitly stresses the antagonistic interests of different classes, an aspect frequently missing from the mainstream economic analysis. <sup>11</sup>

Another strand of literature to which this paper is related is the vast literature in political science and sociology on the elite theory. From the seminal contributions of the classical elite theorists, such as Mosca, Pareto, Michels or Weber, to the more recent work of Dahl, Putnam, Giddens or Higley, there has been an astute awareness that complex

<sup>&</sup>lt;sup>8</sup> Note that productive assets may be more broadly defined, beyond the often-used narrow definition focused on physical or financial capital. For example, in the neo-Marxists framework productive assets also include labor power, organizations, and skills (Wright 1985; Lin and Wu 2010).

<sup>&</sup>lt;sup>9</sup> See Piketty and al. (2017) for evidence of the rising capital share in national income in China.

<sup>&</sup>lt;sup>10</sup> In cases like this, a potentially useful approach is to analyze social classes defined in terms of authority relations (Dahrendorf 1959). This is however beyond the scope of this paper.

<sup>&</sup>lt;sup>11</sup> There is a large literature, largely in the Marxist tradition, which has insisted on the exploitation of the working class as a defining feature of China's economic transformation (e.g. Harvey 2007).

requirements of organizing and administrating the modern society and the rising bureaucratization entail that the limited number of individuals wield a disproportionate power in the society.<sup>12</sup>

Starting with Trotsky (1936) and Djilas (1956), this framework was extended to the socialist countries (e.g. Brzezinski 1962, Matthews 1978, Voslensky 1984, etc.). Following the marketization reforms in Eastern Europe, the focus centered on the elite competition and the changing power balance within the tripartite elite structure consisting of political elites (nomenklatura), managers-technocrats, and intelligentsia (Konrad and Szelényi 1978; Milanovic 1989). This line of research saw an especially strong impetus during the late communism and its fall as well as during the transition process in Eastern Europe in the 1990s. The literature investigated the elites' differential (between countries) role in bringing about the change from communism to capitalism, and related this, to the markedly different post-communist political and institutional trajectories (Szelényi et al. 1998, Roland 2017).

Our paper contributes to this literature by looking at the change among the Chinese elite (defined as the top 5% of the urban population) in the recent decades. The rapid market transition in China has been to a large extent a process steered by the Communist-linked elites which were never entirely homogeneous (that's why we speak of the Communist elites in plural). It is a unique feature of the Chinese transformation that it has been carried out under the authoritative aegis of the Chinese Communist Party (CCP), which has retained its political monopoly against the background of market reforms and economic decentralization. While CCP has acted as a "designer and supervisor" of the reform, the process has led to the profound transformation of the elites (Naughton 2007). The CCP needed to adapt itself to the rapidly evolving social and economic environment in order to preserve its political power, or to ensure its survival. This adaptability is clearly evidenced by the striking change in the elite composition which we document here (Section IV), as well by the change in the social structure of CCP itself and its elite, that is, the CCP members who are also part of the top 5 percent (Section V). The CCP opened itself to individuals with higher education and professional expertise and quickly

<sup>&</sup>lt;sup>12</sup> According to Higley (2018, p. 27): "Elites can be defined as individuals and small, relatively cohesive and stable groups with major decisional power."

lost its peasant and low-urban layout. The late 1980s and especially the 1990s saw a darting rise of technocrats in the CCP (Li 2016, 2018). We shall indeed see that professionals currently represent the largest social group among the elite.

However, it is not clear that this process mechanically signified a drift towards strictly meritocratic elite recruitment. As mentioned, peculiarities of China's transition to capitalism gave rise to a large body of research in political sociology which has studied the character of the elite recruitment in post-Maoist China. Walder (1995) and Walder, Li, and Treisman (2000) have put forward a "dual career path" hypothesis, according to which elite recruitment in China occurs along two distinct paths—one professional and the other political—for which education and political loyalty are assessed differently and which, in consequence, results in a sharp differentiation of the political and professional elite (Walder 1995, p. 311). Herefore, there is, according to these authors, no homogenization of the elite into one higher-educated professional group. Two distinct roads into the elite continue to exist. On the other hand, ongoing social transformation in the 2000s, as discussed below, has prompted other authors to see the two elites merging into one single politico-entrepreneurial elite (despite the difference in the mode of recruitment). Our empirical analysis does not allow us to pass a judgment on

<sup>&</sup>lt;sup>13</sup> See Kaeble (1981) for the general overview on business and political elite recruitment in western countries during their industrialization.

Specifically, on the patterns of bureaucratic promotion in China see Jia et al. (2015), Persson and Zhuravskaya (2016), Fisman et al. (2019), etc.

<sup>&</sup>lt;sup>14</sup> Landry (2008, p. 257) quotes Deng Xiaoping's assumed remark during the "southern inspection tour": "We must pay attention to training people, selecting and promoting to positions of leadership persons who have both ability and political integrity, in accordance with the principle that they should be revolutionary, young, well-educated and professionally competent. This is of vital importance to ensure that the Party's basic line is followed for a hundred years and to maintain long-term peace and stability. It is crucial for the future of China".

<sup>&</sup>lt;sup>15</sup> Already Moore (1944), in his analysis of the Soviet elites in the 1920-30s, had discerned an increased weight given to political loyalty in elite recruitment (for example, between 1923 and 1936, the percentage of company directors in the Party rose from 29 to 97 per cent (p.269)), yet predicted that concurrent demands for loyalty and competence would bring about tensions in the post-Stalinist period. Ineklas (1960) believed that this tension would lead to eventual 'professionalization' of socialist elites (a view later shared by Konrad and Szelényi 1979), a view sometimes labelled as the "modernization theory".

<sup>&</sup>lt;sup>16</sup> See also Szelényi (1986) for a revision of Konrad's and his original thesis.

this issue, but provides the basis needed for a more useful discussion of the nature of the Chinese elite.

Most remarkably, as said, further marketization of China opened the doors for the new group, the entrepreneurs and capitalists. Ideologically, the process of CCP social transformation was reflected in Jiang Zemin, then the President of the CCP and President of China, concept of "The Three Represents" which opened the Party membership more widely to technocrats and even to capitalists. In a well-known proclamation in 2001, Jiang Zemin encouraged the admission of private businesspeople into the party ranks, grounding it on the theory of 'Three represents', according to which "the CCP should now represent society's advanced material, ideological and cultural forces" (Dickson 2003, 2007; Goodman 2014). It should be noted however that, in principle, Chinese Communist Party was never entirely closed to the membership of the "well-meaning" national bourgeoisie: even China's coat of arms with five stars, where the largest one stands for the Communist party, includes national bourgeoisie together with three other classes of workers, peasants, and urban bourgeoisie, as country's component parts. This is a far more flexible attitude than that of the Soviet Union and other Communist countries.

Ever since, the entrepreneurs have been the focal point of numerous conjectures on the future of the political system in China, frequently perceived—due to their growing economic strength<sup>17</sup>—as potential agents of the political change towards democratization of China (as in the modernization theories such as Barrington Moore's summarized by the famous quip of "no bourgeoisie, no democracy"; see overviews in Dickson 2003, Goodman 2014).

However, these predictions turned out wrong, or at least premature. In a sort of the Chinese variant of the *concordia ordinum*, the CCP has been rather successful in holding the tight grip on the economy and there are no indications of a lurking conflict between the party and entrepreneurs.<sup>18</sup> It seems that the "modernization" narratives greatly downgrade how

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<sup>&</sup>lt;sup>18</sup> In fact, Chen and Dickson (2010) argue that their relationship is better described as that of "allies". Also, see Dickson (2003) on the beliefs of entrepreneurs.

thoroughly the Party and the private business are interwoven in China today, and, more generally, overemphasize the disconnection of the economy from the political realm.

The party nomenklatura and private business cultivate strong links both at the institutional and personal level. Numbers of party members have changed a career to become successful entrepreneurs (the so-called *xiahai* entrepreneurs) and many thriving entrepreneurs have been co-opted into the party ranks (Dickson 2003, p. 5; Chen and Dickson 2010). This close interdependence magnifies the importance of political connections in the China's economy today (Fan et al. 2007, Li et al. 2008, Calomiris et al. 2010, Nee and Opper 2010, Guo et al. 2014, Kung and Ma 2016, Chen and Kung 2018, etc.). In all likelihood, this symbiosis contributes to stronger cohesion of Chines elites. One could even go as far to suggest that it is a critical feature of the Chinese political capitalism (Milanovic 2019): a symbiosis where the political elite maintains its supremacy and autonomy while allowing the private sector elite to prosper as long as it is does not question the political order.<sup>19</sup>

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<sup>&</sup>lt;sup>19</sup> One hypothesis to explain why economic transformation in China will not necessarily leads to political transformation is that during the transition the people who benefitted the most are those who are "in the system" (members of the CCP, government, or state-owned companies). Thus, these new elites are unlikely to fight against the system.

#### Section III. The data

Our analysis relies on the nationally representative household income surveys – China Household Income Project (CHIP) – which were drawn from a much larger sample of Urban Household Survey (UHS) conducted annually by the National Bureau of Statistics (NBS).<sup>20</sup> More precisely, we use urban samples of four CHIP waves in 1988, 1995, 2002, and 2013.<sup>21</sup> The richness of the survey information in CHIP allows us to analyze various characteristics of the elites (the urban top 5% income group), and the evolution of these characteristics over time and across regions. The characteristics of interest analyzed here are social class, source of income, education, profession, type ownership (state, private, foreign etc.), and CCP membership.

Despite detailed survey information provided by CHIP, the major challenge is that the surveys are not conducted in the exactly consistent manner across the four waves. For instance, the survey questions vary across different waves. Even when the questions remain the same, the answer options might vary<sup>22</sup>. Thus, harmonization of the survey data is required before conducting any analysis, to ensure that the comparison of statistics across waves is meaningful. We shall explain below the harmonizing process conducted for several key variables. We provide more complete details of data in the online appendix.

Income. The income concept we use is adult disposable income, which is defined as the sum of wage income, business income, property income, and net transfer income (pensions plus other social benefits plus private transfers minus direct taxes and minus social security contributions). Wages include money wages plus wages in kind composed of fringe benefits, imputed value of subsidized goods received, and imputed value of state housing (above the

<sup>20</sup> For instance, CHIP 2013 which we use here is a sample drawn from the annual integration household survey carried by the National Bureau of Statistics in 2013. The latter contains 160 thousand households in 31 provinces.

<sup>&</sup>lt;sup>21</sup> CHIP surveys were also conducted in 2008, however the weight variable of CHIP 2008 has not been released so far and the estimation based on unweighted CHIP 2008 would not provide nationally (or regionally) representative results. Thus, we exclude this survey from our research. For more details, see Sherry Tao Kong (2010).

<sup>&</sup>lt;sup>22</sup> For instance, for the same question regarding the education level, there were 8 options in CHIP 1995 and 9 options in CHIP 2002. For the people with college education level or above, CHIP 1995 includes them in the same category while CHIP 2002 separates them into two categories: college/university and graduate.

nominal rent). Wages in kind were much more important in 1988 than in later surveys. For wage income and business income, CHIP provides individual-level information in all four waves of the survey. For property income and transfer income, individual-level information is provided in CHIP 1995 and 2002, while CHIP 1988 and 2013 provide only household-level information. Thus, in the case of CHIP 1988 and 2013, we equal-split property and transfer income among all adults in the household.

*Profession.* The remarkable social transformation of China in recent decades is, in our opinion, best manifested in the changing professional composition of the population. As mentioned above, the CHIP survey allows us to chart the professional structure of the elite as China moved from the still predominantly command economy of the 1980s, with only timid attempts at reforms, towards more comprehensive marketization of the country observed today. Motivated by our research agenda and at the same time dictated by the specificity of the data, we settle on the following six professional categories: 1) owner (manager) of private business, 2) owner of individual business, 3) professional, 4) higher-level official in the government or state-owned enterprise (SOE), 5) clerical or office staff, and 6) worker. In what follows, we explain in more detail the professional categories of interest and describe how we have harmonized them across waves.

Owner (manager) of private business vs. Owner of individual business. According to NBS classification on company registration type, private enterprises refer to profit-making economic units founded and owned by natural persons, or controlled by natural persons using hired labor. Included in this category are private limited liability corporations, private share-holding corporations, private partnership enterprises, and private-funded enterprises. Individually (owned) business, as the name suggests, is a company form in which the company is owned by only one individual. It is the simplest form of company registration in China, and mostly used for the self-employed, who in some cases and at irregular intervals might employ additional workers. As Huang (2008), citing the official definition, writes, "individual businesses in industry and commerce (geti gongshang hu)... are essentially self-employment proprietorships, although some also [have] outside employees. Under Chinese law, those businesses that employ less than seven workers are considered self-employment businesses." Owners of

private business firms, known as *siying qiye* "differ from the self-employment businesses in that they are much larger and typically employ seven or more workers per firm" (Huang, p. 2008, p. 107).<sup>23</sup> Basically, the term "private" should be understood to imply that there are hired workers whereas the term "individual" implies either self-employment or small or irregular use of hired labor. In the rest of the paper, we shall use the terms "private business owner", and the "self-employed" (or "individual business") for the two groups.

The professional classification changed considerably in the 2013 wave<sup>24</sup> and we had to harmonize data in order to ensure consistency with the previous survey waves (the classification of professions in the questionnaire has remained practically unchanged between the 1988 and 2002 waves). Thus in the 2013 wave there is no direct or clear distinction between "Owner (Manager) of Private Business" and "Owner of Individual Business". Thus, we used auxiliary survey information to classify individuals according to six benchmark categories. More precisely, we identify respondent's profession as owner of private business in 2013 under two scenarios: (i) if (s)he is the employer or self-employed and working in private enterprises; (ii) if his/her occupation is the principal of an enterprise and (s)he is working in a private enterprise (see appendix for a detailed technical exposition). The identification method for owner of individual business is similar as for *Owner (manager) of private business*, except that these are people who work in individual enterprises instead of private enterprises.

*Professionals*. According to the official classification and codes of occupation, this category includes all the professional and technical personnel working in science-related

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 $<sup>^{23}</sup>$  Goodman (2014, p. 38) explains: "In 1984, market reforms were extended to urban China, although initially development was slow, with some reluctance to take initiatives on the part of potential private business people, and some hesitation from the Party-state. Marx had argued in *Das Kapital* that employing more than eight people led to exploitation. Accordingly, the CCP decided to permit the development of small-scale individual household businesses (getihu, 个体户) of up to eight employees. Later, in 1988, somewhat larger private businesses (siying giye, 私营企业) were recognized but these were seen as adjuncts to the state sector, stepping in where the latter was less able to act. Most private business remained small throughout the 1980s."

<sup>&</sup>lt;sup>24</sup> This is due largely to the adoption of new classification and codes of occupation issued in 2009 (GB/T 6565-2009) and changes to the survey questions regarding occupation.

sectors (e.g., science, engineering, agriculture, medical care) and social science-related sector (e.g., economics, finance, law, education, press and publication, religion).<sup>25</sup>

Higher-level officials in the government or SOE. As the name suggests, this category includes all the principals in (i) the CCP, government, or state-owned institutions; (ii) other parties or social organizations; (iii) public enterprises.

Clericals and office staff. According to the official classification and codes of occupation, this category includes all administrative clerks, security and fire control staffs, post and telecommunications staffs, and other clerical staffs and affiliates. It basically includes (what used to be called) "white-collar workers". <sup>26</sup>

Workers includes all unskilled and skilled employees in all industrial sectors.

Provinces and Regions. To classify the economic development of different provinces in China, the National Bureau of Statistics divides China into three economic regions. The coastal eastern region is comprised of 11 provinces and municipalities: Beijing, Tianjin, Hebei, Liaoning, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong and Hainan. The central zone is comprised of 8 provinces including Heilongjiang, Jilin, Shanxi, Anhui, Jiangxi, Henan, Hubei and Hunan. The third economic region is Western China which includes the 12 provinces: Inner Mongolia, Guangxi, Chongqing, Sichuan, Guizhou, Yunnan, Tibet, Shaanxi, Gansu, Qinghai, Ningxia, Xinjiang (see the map below).<sup>27</sup> We adopt the same regional classification to conduct the regional analysis.

<sup>&</sup>lt;sup>25</sup> For more details, we refer to classification and codes of occupation, GB/T 6565-1999 and GB/T 6565-2009.

<sup>&</sup>lt;sup>26</sup> For more details, we refer to classification and codes of occupation, GB/T 6565-1999 and GB/T 6565-2009.

<sup>&</sup>lt;sup>27</sup> In 2011 the National Bureau of Statistics (NBS) updated the economic region classification by dividing the country into four major economic regions: the eastern region, which includes Beijing, Tianjin, Hebei, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong and Hainan; the northeast region, which includes Liaoning, Jilin and Heilongjiang; the central region, which includes Shanxi, Anhui, Jiangxi, Henan, Hubei and Hunan; and the western region, which includes Inner Mongolia, Guangxi, Chongqing, Sichuan, Guizhou, Yunnan, Tibet, Shanxi, Gansu, Qinghai, Ningxia and Xinjiang. (See National Bureau of Statistics of China. Available online: <a href="http://www.stats.gov.cn/ztjc/zthd/sjtjr/dejtjkfr/tjkp/201106/t20110613\_71947.htm">http://www.stats.gov.cn/ztjc/zthd/sjtjr/dejtjkfr/tjkp/201106/t20110613\_71947.htm</a> (accessed on 22 March 2019)). Since our sample covers the period from 1988 to 2013, we adopt the pre-2011 regional classification.

The geographic coverage of CHIP has also been changing through the four waves. However the CHIP sample was selected by systematic sampling method in three layers of east, center and west (see Li Shi et al., 2008) to make sure the survey is regional representative. To be more precise, compared to CHIP 1988, CHIP 1995 adjusted the sample in the Central and Western regions by replacing Shanxi (in Central) and Yunnan (in Western) with respectively Hunan and Heilongjiang (in Central) and Guizhou (in Western region). The coverage of Central and Western regions remained practically unchanged after 1995. The coverage of the Eastern region that includes, among others, Beijing, Guangdong, and Shanghai, has been increasing gradually since CHIP 1995. Overall, the urban population of the included provinces accounts for approximately 50 percent of total China's urban population, with the coverage the highest in the Central region and the lowest in the West. Table 1 gives the details of the evolving regional coverage.

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<sup>&</sup>lt;sup>28</sup> Also see Introduction of CHIP 2013. Available online: http://www.ciidbnu.org/chip/chips.asp?year=2013 (accessed on 22 March 2019)

Table 1. The Geographic Coverage of CHIP

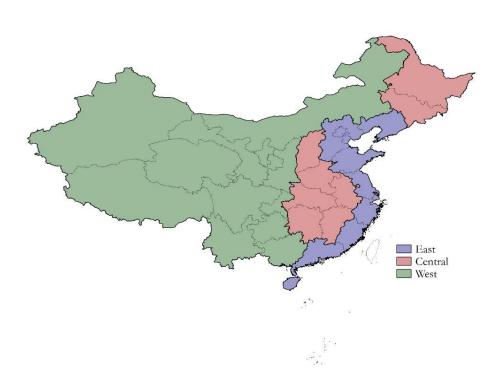
Year of the survey	1988	1995	2002	2013
		Ea	est	
_	Beijing	Beijing	Beijing	Beijing
	Liaoning	Liaoning	Liaoning	Liaoning
	Jiangsu	Jiangsu	Jiangsu	Jiangsu
	Guangdong	Guangdong	Guangdong	Guangdong
			Shandong	Shandong
				Shanghai
Total population included (in m)	44.8	64.5	80	170.4
Percent of total urban population	51	53	50	48

		Cer	ntral	
	Anhui	Anhui	Anhui	Anhui
	Henan	Henan	Henan	Henan
	Hubei	Hubei	Hubei	Hubei
		Hunan	Hunan	Hunan
		Heilongjiang	Heilongjiang	Heilongjiang
	Shanxi			Shanxi
Total population included (in m)	32	63.1	79.8	174.9
Percent of total urban population	48	72	72	83

		W	est	
	Guansu	Guansu	Guansu	Guansu
		Guizhou	Guizhou	Guizhou
	Yunnan			
Total population included (in m)	6.8	8.4	11.1	23.6
Percent of total urban population	14	14	14	14

		All urb	an China	
Total population included (in m)	83.6	136	170.9	368.9
Percent of total urban population	41	50	49	50

## Map of China with three regions



#### Section IV. Changing characteristics of the elite

#### 1. The elite's share of total income

Similar to other studies of income inequality in China (Xie and Zhou, 2014, Zhuang and Shi, 2016; Piketty, Yang and Zucman, 2018; Wu and Perloff, 2005; Ding and He, 2018), the standardized CHIP surveys show a steady increase in inequality. As explained in Section III, inequality is measured by the distribution of after-tax after-transfer (i.e., disposable) income among the adults aged at least 20 years. Individual income (wage, social transfers etc.) is assigned to individuals who have received them while capital income is divided equally among the household members (aged 20+).

Income share of the three top groups we consider here (Figure 1) has steadily gone up. The top 1% share went up from 4.3% in 1988 to 7% in 2013; the share of the elite (top 5%) increased from 13% to almost 20%, and the share of the top decile increased from about 21% to 31%. Measured by the Gini coefficient (calculated across all adults) inequality went up from 0.27 to 0.45.

We thus establish the first, rather unsurprising result, of steadily higher inequality in urban China. For our work, however, the important fact is that the share of total income on which we shall focus (the share of the elite) went up from 13 percent to 20 percent. The Chinese urban elite is probably currently (at the time of this writing, in 2019) receiving around 1/5<sup>th</sup> of China's total urban income. Another way of giving the order of magnitude of the flows with which we are concerned here is to note that since urban China's total income is estimated at about 1/7<sup>th</sup> of world total income,<sup>29</sup> the people we consider here are receiving about 3% of world income—not an inconsiderable amount.

<sup>&</sup>lt;sup>29</sup> According to the World Bank data (World Development Indicators), China's total GDP in PPP terms was in 2017 equal to 20 percent of world GDP. Chinese urban GDP is estimated at some 70% of all-China GDP (calculated from household survey). .

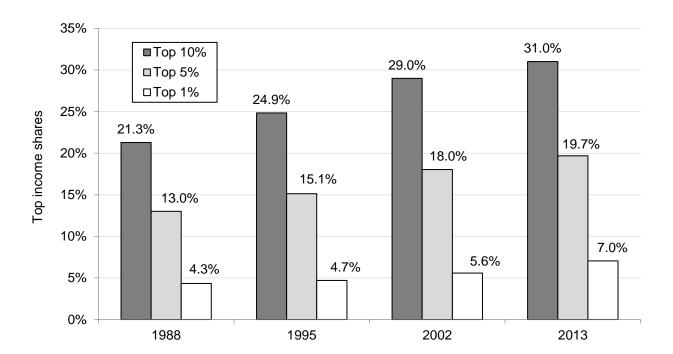


Figure 1. Income share of the top 1%, top 5% and top 10%

#### 2. Income composition of the elite

We have seen that the urban top 5 percent of China's adults increased their share in total income from 13% in 1988 to almost 20% in 2013. What types of income do they mostly receive and has that composition changed? The data are shown in Table 2. Wages, both monetary and in-kind, remain by far the most important source accounting for between 77 and 84 percent of total elite income in 1988-2002. (In 2013, however, the classification does not allow us to separate wages and business income: the two together make 86 percent of total elite income.) Business and property income (together) are between 5 and 6 percent, and the share of transfers declines from 17 percent in 1988 to 11 percent in 2002.

Is the elite's income composition different from the overall income composition in urban China? The answer is not very much. In 1988-2002 surveys, wages accounted for around 80 percent of total urban Chinese incomes, which is the same as their importance in elite income. The difference (in relative terms) is more substantial when it comes to business and

property incomes: in urban China, these two sources accounted for only 2% in 1988 and 1995 (vs. 5-6% among the elite) and in 2002 their shares among both the population and the elite were the same. Transfer income is, unsurprisingly, more important for the total population than for the elite. Overall, we can conclude that the elite depends more on business and property income that does the urban China as a whole, but the shares of these two types of elite income remain (or at least, they did remain until 2002) relatively small. Another way to see this is to note that for each yuan received from business or property, the elite receives more than 15 yuans from labor. With the rising share of owners and entrepreneurs among the elite in 2013 (see below), the relationship has probably moved in favor of business and property incomes.

Table 2. Composition of income, by Income source, for all urban population and the top 5% (in percent)

	All population				Top 5 percent (the elite)				
	1988	1995	2002	2013	1988	1995	2002	2013	
Wages (incl. wages in kind)	83	80	78	76	77	81	84	86	
Business income	1	1	4		5	1	4		
Transfers	15	18	18	24	17	14	11	14	
Property income	1	1	1	24	1	4	1	14	
Total	100	100	100	100	100	100	100	100	

Note: In 2013, wages and business income (as well as transfers and property income) are shown together.

The elite income used to come predominantly from the state sector. In 1988, almost four-fifth of elite income was derived from state and collective sectors (the two combined accounted for more than 10% of all China's urban incomes; see Figure 2). The role of private sector was minimal (6% of elite income). While the situation remained the same in 1995, by 2002, we already see significant changes with private sector income accounting for 17% of elite income, and public and collective sectors shrinking equivalently. In 2013, the private sector overtakes the state sector as the dominant sector from which the elite draws its income. Over the entire period the growth of elite private sector income is nothing short of extraordinary: in

1988, the private sector income received by the elite amounted to only 0.8% of all urban incomes in China; in 2013, it was tenfold greater: more than 8% of all urban incomes.

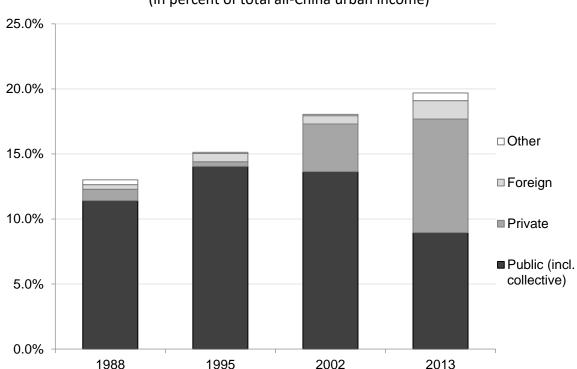


Figure 2. Income sources, by sector of ownership, of the top 5% (in percent of total all-China urban income)

### 3. Social composition of the elite

Our data on the social composition of the elite are available for all four years. They allow us to see what is only hinted at when we look at elite income sources, namely a major shift toward owners and the self-employed (individual business owners) among the top 5% (Figures 3 and 4). Owners of large private enterprises and the self-employed accounted for only 3% of elite members in 1988. Their share doubled to about 6% by 2002, a significant but not a dramatic expansion (corroborated, as we have seen, by the data on the increased importance of business and propriety income). It then "exploded" in the next decade, increasing more than three-fold to reach almost 20% in 2013.

Figure 3. Social composition of the top 5% (percentage of individuals)

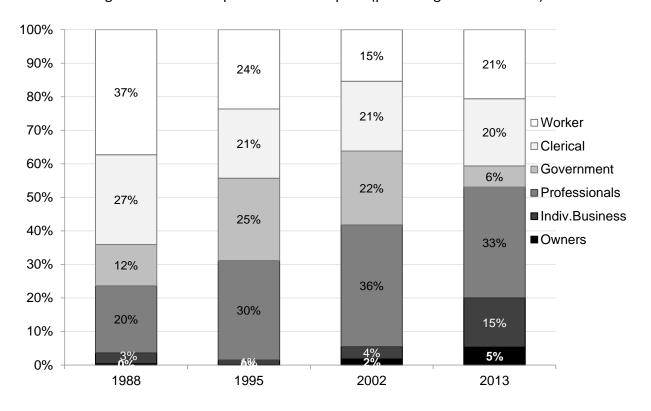
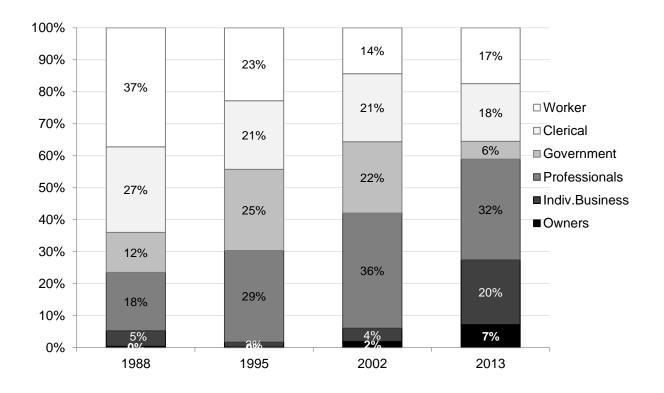


Figure 4. Social composition of the top 5% (percentage of total elite income)



The elite which before the important urban reforms in the early 1990s was overwhelmingly composed of workers, clerical staff and government officials—the three classes accounting for 76% of the people in the top 5% in 1988—has by 2013 become an elite where professionals and business owners are in the majority (Figure 3). In fact, the 2013 survey shows that 53% of the elite is composed of professionals and owners of private and individual businesses.<sup>30</sup> Professionals have become the largest social group among the elite. China has thus, over the period under study, transformed itself from a society where workers and employees, most of whom linked to the state, accounted for ¾ of the elite to a situation where private-sector business people and professionals are the majority of the new elite.

A different way of looking at the social change among the elite consists in looking at the share of elite income received by different classes (Figure 4). In 1988, 76 percent of elite income was received by workers, clerical employees and government officials. (This was exactly equal to the percentage of people from these three classes who were part of the elite). At that time owners of large and individual businesses received only 5 percent of total elite income, slightly in excess of their then share of 3 percent in total number of elite individuals. Finally, professionals received 18 percent.

This has dramatically changed since. By 2013, workers, employees, and government officials earned only 41 percent of elite total income (while, as we have seen, representing 46 percent in terms of the people among the elite) while business owners (of the two kinds) received 27 percent of total elite income, and professionals 32 percent. Therefore, the domination of professionals and business owners among the new elite is even stronger when measured in terms of elite income than in terms of number of people among the elite. This is due to the fact that owners tend to have higher incomes that other members of the elite. In 2013, private-sector and individual business owners, "the homo novi" of the Chinese transition, got 27 percent of all elite income while representing 20 percent of elite members. Thus their income was, on the average, 35 percent higher than the average elite income. Accordingly,

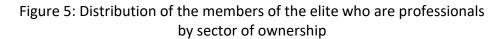
<sup>&</sup>lt;sup>30</sup> We use interchangeably the terms individual business owner and entrepreneur. "Owners" are (as explained in Section III) owners of larger businesses. Both categories together are called "business owners".

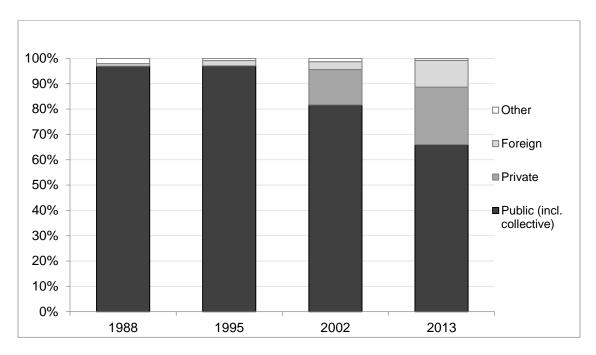
business owners' importance among the top 1% is even greater than among the top 5%: they account for a third of the people in the top 1% and receive (in 2013) a whopping 46 percent of all top 1% incomes (see Table 3).

There are, of course, obvious issues of classification to which we alluded in Section III. Lumping professionals with business owners may not be fully appropriate since many professionals may be employed by state-owned companies or by the government. But there too, as Figure 5 illustrates, there has been a movement in favor of the private sector. In 1988, almost all professionals were employed by the state and collective sectors; in 2013, only two-thirds were. The other third worked in the private and foreign-owned companies. Thus, the percentage of people among the elite whose incomes are private-sector related increased from 5% in 1988 (when all professionals were employed by the public sector) to almost 40% in 2013.<sup>31</sup> The increase in social classes whose livelihood is *not* related to the state among the elite is perhaps the most dramatic reflection of the deep changes underwent by the urban China in the past thirty years.

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<sup>&</sup>lt;sup>31</sup> The latter number is obtained as the sum of income by private and individual business owners (27%) plus one-third of the income of professionals (around 11%; see Figure 4).





Finally, a third way to look at the change in the elite composition is to compare the social structure of the elite with that of all Chinese urban population. Here, in effect, we ask the question: to what extent is the rising share of the business owners among the elite a product of the generally rising importance of business owners in China? We note from Table 3 that while the increase in the share of individual (small) business owners among the population matches almost perfectly its rise among the elite (both rose by a little over 11 percentage points), the number of private (big) business owners among the elite rose more sharply than its numbers among the Chinese urban population (almost 5 percentage points vs. 1.2 percentage points). The likelihood of private business owners to be among the elite has remained about 4 to 5 times greater than that of the other categories combined. In conclusion, the rising importance of private and individual business owners among the elite seems to be a reflection of an overall increase in the numbers of entrepreneurs and capitalists, who also tend to be much richer than the average person, rather than the product of an exceptional enrichment of business owners as such.

The conclusion however is different when it comes to workers. Their share among the entire urban population has hardly changed between 1988 and 2013 (minus 1.3 percentage points), but their importance among the elite collapsed by almost 17 percentage points. Thus, while in 1988, a worker's chances to be among the five percent richest urban adults was about 0.7 (compared to the average of all social groups=1), it decreased to only 0.4.

Table 3. Social composition of the top 5% and top 1% of adults in urban China in 1988 and 2013 (in percentage of adults members of the top 5% and top 1%)

		Urban China	Э	Top 5%			Top 1%		
	1988	2013	Change	1988	2013	Change	1988	2013	Change
Workers	51.9	50.3	-1.6	37.3	20.6	-16.7	35.5	11.8	-13.7
Employees (clerical staff)	24.0	15.3	-8.7	26.8	20.1	-6.7	29.4	17.6	-11.8
Government officials	7.3	3.9	-3.4	12.3	6.3	-6.0	13.2	3.3	-9.9
Professionals	16.1	18.2	+2.1	20.0	33.0	+13.0	12.7	33.3	+20.6
Individual business owners	0.7	11.9	+11.2	3.3	14.7	+11.4	8.6	25.5	+15.9
Private business owners	0.1	1.3	+1.2	0.4	5.3	+4.9	0.5	8.5	+8.0
Total	100	100	0	100	100	0	100	100	0

#### 4. Educational level of the elite

The top 5% have become much more educated between 1988 and 2013 with those with university education, rather than those with lower middle school, being the most important group (Table 4), and a much greater share of the total top 5% income is received by the highly educated (Table 5). At the beginning of the period, only 12 percent of the total elite income went to the university-educated members and 15 percent was received by these with only primary education. By the end of the period, the proportions were 44 and 1 percent.

Figure 6 illustrates the steady nature of the shift toward a more educated elite. The increase in the share of the university- and polytechnic-educated members was constant throughout the years studied here.

Is the increase in the share of the top 5% income received by the highly-educated simply the result of an overall increase in the education level in urban China, or greater recruitment (or higher average income level) of the university-educated who are members of the elite? As Tables 4 and 5 show, both effects matters, but the latter seems to have been stronger. In urban China overall, the share of income earned by the university-educated increased by 17 percentage points while among the elite it grew by almost twice as much (32 percentage points). For the middle educational categories, the changes in urban China overall and in the elite were about the same—and of course for the bottom education categories, their drop in the elite income was sharper than in the urban China overall. In conclusion, the urban elite became more educated with its education level increasing faster than in the urban China overall, and a much larger part of elite income was earned by those with university education.<sup>32</sup>

<sup>32</sup> 

<sup>&</sup>lt;sup>32</sup> Note that the quasi equivalence of the shares of educational categories by numbers and by total income among the top 5% (Tables 2 and 3) implies that incomes of members of different educational groups, once they are part of the top 5%, do not differ much. Thus the mean income of university-educated members of the top 5% is equal to the mean income of all members of the top 5% (their shares in total numbers and in total income is the same: 44 percent). This was, by the way, the case in 1988 too when both shares were also equal, at much lower level of 12 percent. We shall find the same result below (Section VI): conditional on being in the elite, returns to education are close to zero.

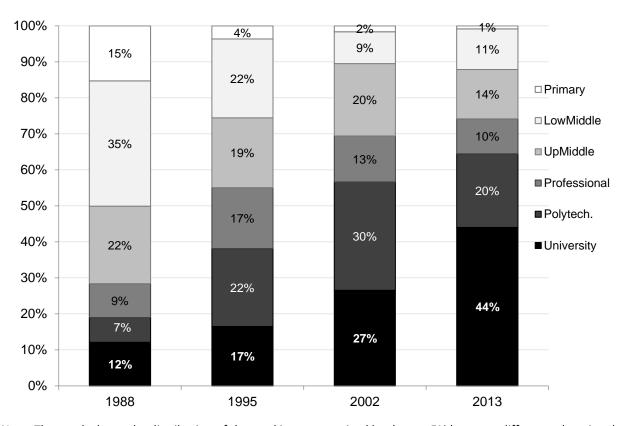
Table 4. Educational attainment in all urban China and the elite in 1988 and 2013 (in percent)

Education		Urban China		Top 5%				
	1988	2013	Change	1988	2013	Change		
University	6	15	+9	12	44	+32		
Polytechnic	6	15	+9	7	22	+15		
Vocational	10	10	0	9	8	-1		
Upper middle	22	18	-4	20	14	-6		
Lower middle	38	29	-9	33	10	-23		
Primary	14	11	-3	15	1	-14		
No primary	6	3	-3	0	0	0		
Total	100	100	0	100	100	0		

Table 5. Distribution of total and elite income among different educational categories in 1988 and 2013 (in percent)

Education		Urban China		Top 5%				
	1988	2013	Change	1988	2013	Change		
University	7	24	+17	12	44	+32		
Polytechnic	7	19	+12	7	20	+13		
Vocational	11	11	0	9	10	+1		
Upper Middle	21	17	-4	22	14	-8		
Lower Middle	36	22	-14	35	11	-24		
Primary	13	6	-7	15	1	-14		
No Primary	5	1	-4	2	0	-2		
Total	100	100	0	100	100	0		

Figure 6. Distribution of the top 5% income share among people of different educational attainment (in percent)



Note: The graph shows the distribution of the total income received by the top 5% between different educational categories.

#### 5. Regional distribution of the Chinese urban elite

It is well-known that China is regionally diverse and unequal: Eastern provinces are much richer and grew at a higher rate than the rest of China (see Table 6). Although these differences are even greater when we combine rural and urban areas (because of the greater importance of generally poorer rural areas in Western and Central China) they are still large even when we consider urban areas alone. In 2013, Eastern urban region had an income level some 40 percent higher than the Center and the West and that gap was greater than it was at the beginning of the period under study here. The Eastern region is also more unequal than the other two, whether measured by the Gini or by the top 5% share. Not surprisingly, between 1988 and 2013 inequality increased in all three regions quite dramatically, with the elite income share in the East going from 13.6 percent of total (Eastern) urban income to more than a fifth. The change was only slightly less dramatic in the other two regions.

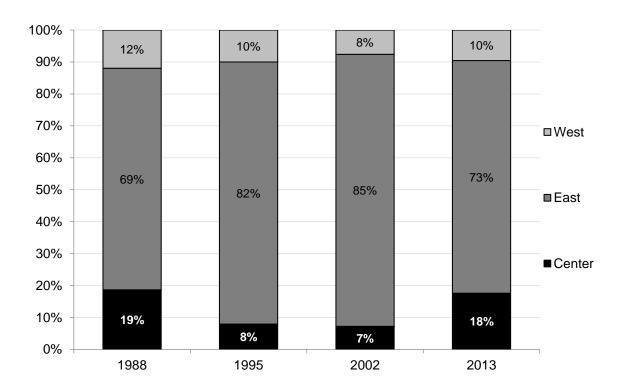
Consequently, the East was and remains the richest and the most unequal region. It is therefore not surprising that the lion's share of all-China urban elite's income is earned in the Eastern provinces (see Figure 7). The share of the East has even slightly increased (from 69 to 73 percent) while the shares of the other two regions have correspondingly declined by 1 and 2 percentage points between 1988 and 2013. What the figures highlight however is the remarkable stability in the regional distribution of the elite: while the composition of elite income, its social structure, and education have all changed in a remarkable fashion, its geographical concentration has not been much affected. One may conclude that whether the urban Chinese elite tends to be composed of social classes who are more, or less, linked with the state, or are more entrepreneurial or less, their geographical location does not seem to vary.

Table 6. Income level and inequality in Eastern, Central and Western China (urban areas)

		(current	e nominal Income current yuan per adult)		Average real income level (2010 yuan per adult)			Gini			Top 5% share		
	1988	2013	Average change (% p.a.)	1988	2013	Average change (% p.a.)	1988	2013	Change (% points)	1988	2013	Change (% points)	
Eastern region	2114	38221	12.3	5541	34384	7.6	28	45	+17	13.6	20.4	+6.8	
Central region	1716	27226	11.7	4496	24493	7.0	26	45	+19	11.7	18.3	+6.6	
Western region	1880	27121	11.3	4928	24399	6.6	27	41	+14	11.7	16.4	+4.7	
Ratio: East/West	1.1	1.4		1.1	1.4								

Note: Real income expressed in 2010 yuans (CPI from World Development Indicators 2018).

Figure 7. The shares of the three regions in total urban China's elite income



The next question we ask is whether the social composition of the elite—namely, the gradual movement toward a private-sector elite which is the most salient feature of elite change in this period—has played differently in the three regions. Table 7 shows the evolution of the class structure among the top 5% in the three regions, where, in order to highlight the role of the private sector we have merged the six principal social groups into three: (a) private business owners and the self-employed, (b) professionals, and (c) workers, government officials, and clerical staff. In all regions, the first two groups have expanded and the third has shrunk. For example, in the Central region (where the share of the private sector group among the elite is the greatest), its share has gone up from 6 percent of population in 1988 to 36 percent in 2013. The professionals' share in the Central provinces has increased from 22 percent to 28 percent. Consequently, the importance of government-connected elite has literally halved: from 72 percent to 36 percent. The evolution in the other two regions has been very similar. Just to highlight the magnitude of the change, note that the private business people's share in the elite ranged between 3 and 6 percent (in the three regions) in 1988 while 25 years later it was between 16 and 36 percent.

The results thus strikingly illustrate the overturning social (or class) composition of China's urban elite across all regions. They show that the all-China results are not driven by one or another region only: they are present in all geographical areas. Obviously, some regions (e.g. the West) may have a greater share of government-linked individuals in the elite, but the key finding, and the key similarity, is the one relating to the direction of change: in all regions, the past 25 years have brought the rising dominance of private sector-linked groups and professionals among the elite. Although the direction of the change was uniform, the extent of change differed between the regions. The most dramatic changes occurred in the Center where private-sector-related elites increased the most. The East experienced the most significant rise of professionals, while the West experienced a slightly more modest rise in the importance of the private-sector classes and professionals.

Table 7. Shares of the private business-linked, professionals, and government-linked elites in the top 5% (regional-distribution; in percent)

		Cente	r	East			West			
	1988	2013	Change (% p.a.)	1988	2013	Change	1988	2013	Change	
Owners and the self-employed	6	36	+30	3	16	+13	4	18	+14	
Professionals	22	28	+6	20	35	+15	20	27	+7	
Government and workers	72	36	-36	77	48	-29	76	55	-21	
Total	100	100	0	100	100	0	100	100	0	

Note: The universe is composed of the top 5% adults in all China, and the table shows their regional and social distribution. (In other words, this is *not* the top 5% elite specific to each individual region). 100 for each region sums all members of the *all-China* top 5% elite that are located in a specific region.

# Section V. The role of the CCP membership

## 1. The representation of CCP members in top income groups and their relative income

The share of CCP members among the elite (both the top 5% and the top 1%) increased continuously between 1988 and 2002, and then dropped rather precipitously between 2002 and 2013. By 2013, the share was lower than at the beginning of the period. Both the levels and the evolution of the share are very similar for the top 5% and the top 1%. As Figure 8 illustrates, at its peaks, CCP membership in both elite groups exceeded one-half, and among the top 1% it reached almost 60 percent. But by 2013, CCP members were only one-third of the top 5% and slightly under one-quarter of the top 1%.

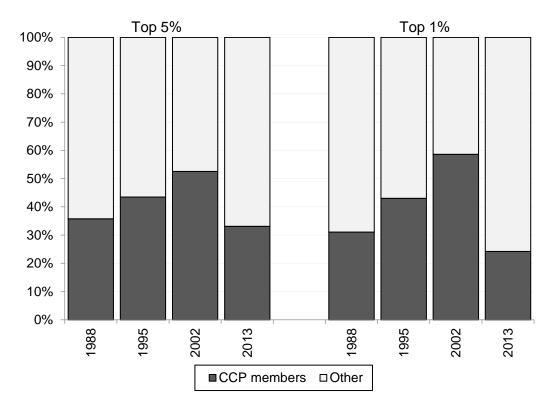


Figure 8. The share of CPP members among the elite

However, CCP members in the top 1% became relatively richer, compared to the average income of the rest in the top 1%. In all years prior to 2013, the relative income of CCP members was about the same as the relative income of other members of the elite whether among the group that comprises percentiles 91-95, percentiles 96-99, or the top 1%. But In 2013, we note a significant increase in their relative income in the highest income group where CCP members have, on average, an income 20 percent above the mean of the group (or 25 percent above the income of non-members; see Figure 9). One can therefore conclude that CCP members who are very rich are now fewer in numbers (their participation in the elite groups is less) but they are, at the very top, relative to their non-Party peers, richer than in the past. The divergence of the CCP members who are in the top 1% from the rest of CCP membership, and obviously from the population at large is a topic to which we shall return.

Figure 9. Income of CCP members of the elite groups compared to the average income of all elite members

Note: The graph shows the average income of CCP members who are part of percentiles 91 to 95 (left), percentiles 96 to 99 (middle) and the top percentile (right) relative to the mean income of that group. Value of 1 indicates that average income of CCP members is the same as the average income of the group (and hence also to the average income of non-Party members).

### 2. CCP membership and social class

Table 8 shows the social structure of CCP membership overall and of CCP members who are part of the top 5% in the beginning and at the end of the period (for the entire period see Figures 10 and 11). We note that in 1988 the two social structures (overall and the elite) were practically the same: the percentage of workers or government officials in total CCP membership was very closely reflected in the share of such social groups among the top 5%. Thus, for example, the most numerous social group in CCP membership in 1988, employees (clerical workers), accounted for 39 percent of all CCP members and 34 percent of CCP members in the top 5%; similarly, government officials were 23 percent of all members and 26 percent of CCP members in the elite. The implication of this finding is that belonging to one versus another large social group—once one is a CCP member—was not a factor that mattered for one's income level. In other words, CCP members who were government officials were just slightly more likely (26/23=1.1) to be members of the elite than CCP employees (34/39=0.9) or even CCP workers (12/16=0.75). This means that the within-social-group income distributions of CCP members were quite similar.

Table 8. Distribution of CCP members among different social classes in 1988 and 2013 (in percent)

Social class	All CCP members			CCP members in the top 5%		
	1988	2013	Change	1988	2013	Change
Workers	16	30	+14	12	15	+3
Employees (clerical staff)	39	32	-7	34	33	-1
Government officials	23	8	-15	26	9	-17
Professionals	23	26	+3	28	38	+10
Individual entrepreneurs	0	3	+3	0	3	+3
Larger business owners	0	1	+1	0	2	+2
Total	100	100	0	100	100	0

Note: The table shows the distribution by social class of all CCP members and of CCP members who are part of the top 5%.

But in 2013, not only has the social composition of membership changed, bringing in private sector businessmen and increasing significantly the participation of workers and professionals, but belonging to different social groups affected one's likelihood of being part of the elite. Not unexpectedly, the share of private businessmen who are CCP members in the elite is greater than their share in the overall CCP membership (that is, private businessmen members of CCP have a more top-heavy distribution than say, workers who are members of CCP). The likelihood of workers CCP members being part of the elite diminished: it is only ½ of the average (15 percent of CCP members in the elite are workers vs. 30 percent of all CCP membership who are workers), while the likelihood of professionals CCP members being part of the elite increased (38/26=1.5). Thus, professionals who are CCP members are now three times as likely to be part of the moneyed elite than workers who are also CCP members. The last finding means that professionals who are CCP members are over-represented among the rich, and workers under-represented. In other words, the within-social-group income distributions of CCP members are no longer similar. This has implications as to how we regard the social composition of the Chinese Communist Party. If we look at the overall membership, it is apparent that seven out of each ten members are part of the "older", in the past strongly statedependent, categories such as workers, clerical staff and government officials. But if we look at the rich (elite) Party members, the breakdown is 57 to 43 percent between the "old" and the "new" classes. In other words, while the Party overall has still a majority membership of the "old" social groups, its top is increasingly dominated by the "new" social groups.

Figure 10. Social composition of CCP membership (percentage of people)

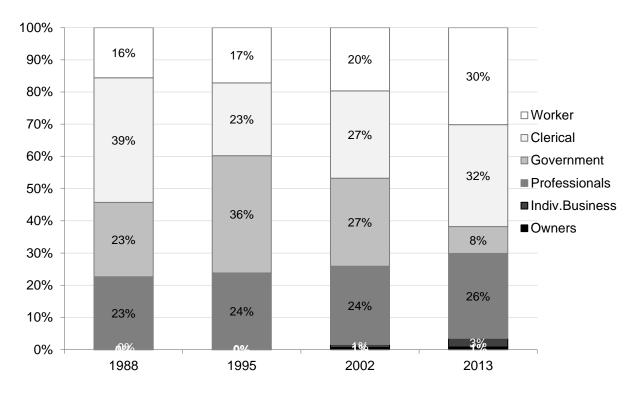
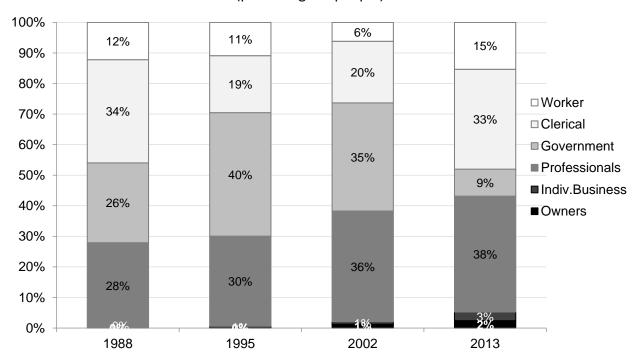
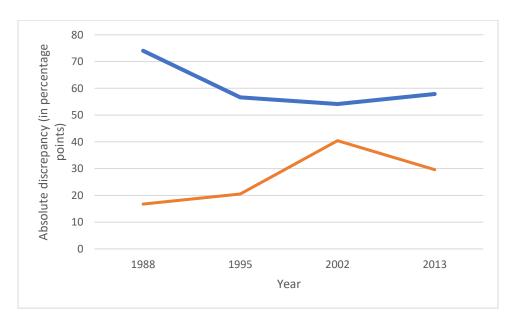


Figure 11. Social composition of CCP members, who are part of the elite (top 5%) (percentage of people)



This leads us to ask a more general question of (a) how representative is Party membership compared to all Chinese urban population, in addition to the question of (b) how closely the wealthy part of the Party (CCP members who are in the top 5%) corresponds to the overall Party membership. Consider (a) first. If we add the absolute values of all percentage discrepancies between the share of each social class in total urban population and its share in CCP membership (such as, for example, for government officials who are 7.3% of urban population but 22.6% of CCP membership which yields the discrepancy of 15.8 points), we obtain the top line in Figure 12 which shows stability since 1995. CCP membership does not perfectly match urban population by its social class, but it does a better job than in 1988. To answer the second question, we do the same addition of absolute discrepancies between different social classes' shares in total CCP membership and their shares among the CPP members who are part of the elite. There, the bottom line in Figure 12 shows a mild increase implying an overall divergence of the Party elite from the CCP membership.

Figure 12. Discrepancy between class composition of the urban population, CCP membership and CCP membership that is part of the top 5%



Note: The top line gives the absolute discrepancy between urban population and CCP membership; the bottom line gives the absolute discrepancy between CCP membership and CCP membership that is part of the richest 5%. The discrepancy is measured in terms of social group shares.

We can illustrate the processes of over- or under-representation using the examples of professionals and workers. Professionals tend to be over-represented in CCP compared to their importance in China's urban population. This is shown in Figure 13 (panel a) by the first bar which is always positive and since 1995 is steadily increasing (implying that over-representation is getting greater). The second bar shows the increasing over-representation of professionals in the elite compared to their share in CCP. To give the idea of the values, consider year 2013: professionals were 18% of the urban population, 26% of all CCP members, and 38% of CCP members who are in the top 5 percent. So the first over-representation was 8 percentage points, the second 12 percentage points.

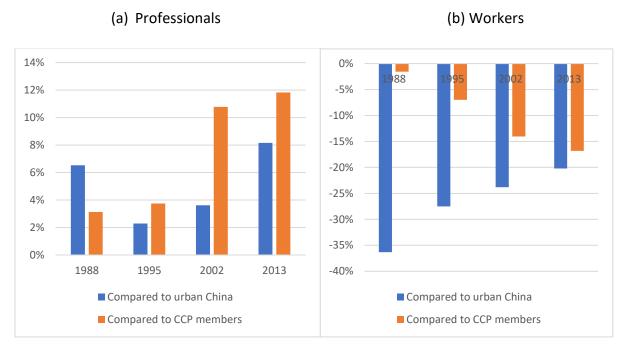
But the evolutions of workers was very different. As panel (b) in Figure 13 shows, while their under-representation in CCP compared to their numbers in the urban population decreased, with CCP thus bringing in relatively more workers, their underrepresentation among the elite was rapidly getting "worse". Consider 2013 again: workers were 50% of all urban population, 30% of all CCP members, but only 15% of all elite CCP members.

If we then, at least conceptually, combine the two under/over-representations, we conclude that professionals' share of CCP membership has not changed much but that professionals who are CCP members have become much more numerous among the elite, that is they have become richer.<sup>33</sup> On the other hand, workers' share in CCP membership in 2013 reflects more closely workers' share in the overall urban population, but workers under-representation among the elite is significantly greater than before. In conclusion, while the structure of CCP membership in the recent period approximates better the population structure than in 1988, the CCP top is moving further away from both CCP overall membership structure and that of the urban population as a whole.

<sup>3</sup> 

<sup>&</sup>lt;sup>33</sup> This finding parallels the rising importance of professionals in the elite as such that was discussed in Section IV.3..

Figure 13. Over-representation of professionals and under-representation of workers



Note: The left bars show the share of professionals or workers CCP members against their share in total urban population. Positive (negative) values imply they are over-(under-)represented in the Party. The right bars show the share of professionals or workers CCP members who are part of the elite vs. their share in all CCP membership. Positive values imply that they are over-(under-)represented among the elite compared to their share in CCP membership.

### 3. The returns to CCP membership

How valuable is CCP membership? Table 9 shows the results of the regressions, run for each of the four years across the whole survey population, that try to "explain" income level of adults. We use a list of variables that are commonly thought to be correlated with income, many of which we have already discussed above: demographics, education, social class, ownership of the company one works for, region, and finally the membership in the Chinese Communist party.<sup>34</sup> The omitted category is worker employed in the state sector in the Central region.

The results obtained for the control variables are fairly consistent; coefficients on almost all of them are highly significant (in most of the cases well below the 1% level), and we shall discuss them only briefly. <sup>35</sup> Women's penalty is present throughout and is increasing over time: in 2013, women had incomes some 28 percent below men while only 8 percent below men in 1988. Age shows the usual inverted U-pattern with very stable coefficients. Education is—not surprisingly in the light of what we already established regarding the rising share of the university educated among the elite—becoming much more valuable among the entire urban population. The returns to each additional year of schooling increase from only 2 percent in 1995 to 6 percent in 2013. (It should be recalled that the explanandum here is total income and not only wage income, for which education may be even more important). Private sector owners, of big or smaller companies, enjoy a clear income premium in 2013: for larger owners, 56 percent over an equivalent person working in a state-owned company, for smaller owners (including the self-employed), 21 percent. This has not always been so: in the beginning of the period, the premium was non-existent for large owners and was even negative in 1995. Professionals and government officials though have always enjoyed a premium compared to state-sector workers, and that premium is steadily going up with each survey. But interestingly, when it comes to the ownership of companies that one either owns or is employed by, cooperatives and the private sector have a "penalty" compared to the state sector, and only

<sup>34</sup> This type of specification is more commonly used in wage regressions. However wages account for almost 80 percent of total urban income (see Table 2).

<sup>&</sup>lt;sup>35</sup> R<sup>2</sup> is reasonably high, at between 0.25 and 0.28.

foreign-owned companies have had a consistent premium over the state sector. In the latest survey their premium amounts to 27 percent. Finally, the Eastern region enjoys a premium of between 21 and 33 percent, and the Western of between 5 and 9 percent (both compared to the Central provinces).

Before we move to the CCP premium, let us note that the comparison between the early results (1988) and those for the most recent year (2013) corroborates our findings of greater equality in the early period when measured by the Gini coefficient or the top 1% share. Here, that finding is reflected in several features: women's penalty was lower in the past, education mattered much less (due to its very low financial returns), and incomes of social classes were more "bunched" together with both the private sector, and also professionals, government officials and clerical workers enjoying smaller advantage compared to state-sector workers than is the case in the more recent surveys. <sup>36</sup> Thus the results of regressions are consistent not only with lower overall Gini inequality in the 1980s, but they also allow us to retrieve the features of the "structural egalitarianism" that existed in pre-reform China, namely low gender discrimination, low appreciation of education, and "income-compact" social classes. All of these are indeed the characteristics that, probably in a more extreme fashion, have been argued to have been present in China during its Maoist period, and that we find, to some extent still extant in 1988, but almost wholly gone by 2013.

We now move to the value of CCP membership. It was always (with the strange exception of 1995) valuable: its premium amounted to between 5 and 12 percent.<sup>37</sup> Other than the oddity of 1995, the premium is the lowest in 2013 but the differences between the various years are not statistically significant. The premium can be thought, in the most direct fashion, to reward the membership by allowing people who are CCP members to accede to positions of greater authority and hence to have a higher income. Although this is very likely, one has to

<sup>36</sup> In 1988, professionals commanded a premium of only 8 percent over workers; in 2013, the premium was 19 percent. For government or SOE officials, the premium increased from 9 to 15 percent; for clerical staff from 5 to 10 percent.

<sup>&</sup>lt;sup>37</sup> The only other paper of which we are aware that tries to estimate the CCP premium is by Song McLaughlin (2017 that uses wage data from urban CHIP in 2002. In a formulation that is most similar to ours (in Table 2, equation 3) she finds the return to the CCP membership to be 9 percent.

allow for the possibility that the premium may also be due to the unobserved individual characteristics like hard work or ambition. It is, in effect, well-known that the CCP membership is designed to be "elitist" in the sense that the number of candidates always exceeds the number of those who are accepted into membership. For example, in 2016, more than 20 million Chinese have applied to join the Party, but only 1.9 million were accepted.<sup>38</sup> It is thus very likely that the membership will appeal to those who are more ambitious, and also that those who are more perseverant are more likely to obtain it. Thus the membership premium may indeed be thought to reflect underlying individual characteristics equally or perhaps even more than some kind of advantage conferred on members regardless of their personal worth. We obviously cannot disentangle these two effects.<sup>39</sup>

We ask next, how important is CCP membership for the elite members (those who are in the top 5%). We run the same regressions as in Table 9 but just over the elite group. The results (shown in the on-line Annex, Tables 1-4) are quite different: many of the control variables that behaved in expected ways and had highly significant coefficients do not matter for the elite group. This is not surprising: condition on being a member of the elite, the differences in income are unlikely to depend on observable characteristics such as age, gender and even education. Only in 2013, and to a lesser extent in 2002, education has a very small (statistically significant) effect, 40 and the private-sector owners tend to have higher incomes than other (equivalent) members of the elite; also, the Eastern region displays a premium of about 9 percent. The CCP membership however is equally insignificant in all four surveys.

When we decide to go a bit further and to look at the role of CCP membership for various social classes, that is, to interact the CCP dummy with social class, we find that CCP

<sup>&</sup>lt;sup>38</sup> Xinhua, 30 June 2017, cited in Cabestan (2019, p 156).

<sup>&</sup>lt;sup>39</sup> Note that this is not an argument against the widely held view that the Party is increasingly recruiting from among opportunistic individuals who are interested in material success and not in ideology. In fact, the argument that the premium rewards higher individual ambition is fully consistent with that view: more opportunistic people are likely to be, almost by definition, more ambitious. So indeed as the CCP becomes a Party that is less ideological and more pragmatic, the CCP premium (due to unobserved personal characteristics) may be expected to rise.

<sup>&</sup>lt;sup>40</sup> It is interesting to note that in recent years education seems strongly correlated with elite membership but once one is in the top 5%, education seems to play only a very minor role.

membership is only significant for larger business owners. In 2013, the premium amounts to 34 percent (and is statistically significant at 5% level; see Table 10). <sup>41</sup> The result confirms what we noted above, namely the fact that private-sector businessmen who are in 2013 members of the elite group tend to have higher incomes than other members of the top 5%, but we also show that being a CCP member is especially valuable for this group (and is of no significance for other social groups). It is also noteworthy that CCP membership was not significant for the large business owners who were members of the elite in the previous years.

 $^{41}$  The premium is estimated, as before, in comparison to a state-sector worker in the Central region who is not a CCP member and is in the top 5%.

Table 9. Determinants of income (dependent variable: natural log of disposable adult income; population: all Chinese urban population)

Variable	1988	1995	2002	2013
<u>Demographic</u>				
<u>variables</u>				
Sex (0=male;	-0.08**	-0.14**	-0.17**	-0.28**
1=female)	(0.00)	(0.00)	(0.00)	(0.00)
Age	0.06**	0.06**	0.06**	0.05**
	(0.00)	(0.00)	(0.00)	(0.00)
Age squared	-0.0006**	0.0007**	-0.0007**	-0.0006**
	(0.00)	(0.00)		(0.00)
<u>Education</u>				
University	0.05**			
	(0.00)			
Polytechnic	0.0001			
	(0.99)			
Upper middle	-0.003			
school	(0.98)			
Lower middle	-0.008			
school	(0.43)			
Primary school	-0.03*			
	(0.04)			
Uncompleted	-0.13**			
primary	(0.00)			
Years of		0.02**	0.04**	0.06**
education		(0.00)	(0.00)	(0.00)
Social class				
Owner of larger	-0.15	-0.46**	0.53**	0.56**
business	(0.15)	(0.01)	(0.00)	(0.00)
Entrepreneur	0.32**	-0.20*	0.17**	0.21**
(owner of	(0.00)	(0.01)	(0.00)	(0.00)
smaller business)				
Professional	0.07**	0.22**	0.32**	0.19**
	(0.00)	(0.00)	(0.00)	(0.00)
Government or	0.09**	0.22**	0.31**	0.15**
SOE official	(0.00)	(0.00)	(0.00)	(0.00)
Clerical worker	0.05**	0.11**	0.21**	0.10**
	(0.00)	(0.00)	(0.00)	(0.00)
Ownership of				
place of work				

Variable	1988	1995	2002	2013
Collective	-0.12**	-0.24**	-0.33**	-0.12**
ownership	(0.00)	(0.00)	(0.00)	(0.00)
Private	-0.22**	-0.16**	-0.19**	-0.09**
	(0.00)	(0.00)	(0.00)	(0.00)
Foreign	0.35**	0.32**	0.11**	0.27**
	(0.00)	(0.00)	(0.01)	(0.00)
Other	-0.15**	-0.10	-0.37**	-0.24**
	(0.00)	(0.13)	(0.00)	(0.00)
<u>Region</u>				
East	0.21**	0.33**	0.37**	0.26**
	(0.00)	(0.00)	(0.00)	(0.00)
West	0.09**	0.05**	0.09**	0.05**
	(0.00)	(0.00)	(0.00)	(0.00)
CCP membership	0.06**	-0.13**	0.12**	0.05**
	(0.00)	(0.00)	(0.00)	(0.00)
Constant	6.40**	7.35**	7.37**	9.01**
	(0.00)	(0.00)	(0.00)	(0.00)
R <sup>2</sup>	0.28	0.26	0.29	0.25
(F)	(321)	(311)	(246)	(201)
N	17445	13930	9655	9562

Note: The omitted category is worker employed in the state sector in the Central region (professional school graduate for the years where number of years of education variable is not available). *p*-values between parentheses. \*\* (\*) indicates significance at 5 (1) percent level. All are weighted regressions run with survey sample weights.

Table 10. Determinants of income (dependent variable: natural log of disposable adult income; population: top 5% of Chinese urban population)

Variable	1988	1995	2002	2013
<u>Demographic</u>				
<u>variables</u>				
Sex (0=male;	0.13			-0.013
1=female)	(0.57)			(0.66)
Age	-0.0002	-0.006	0.009	0.008
	(0.97)	(0.28)	(0.40)	(0.34)
Age squared	-0.0000	-0.05*	-0.000	-0.000
	(0.53)	(0.02)	(0.34)	(0.46)
<u>Education</u>				
University	0.03			
	(0,47)			
Polytechnic	-0.03			
	(0.55)			
Upper middle	0.013			
school	(0.75)			
Lower middle	0.008			
school	(0.84)			
Primary school	-0.023			
	(0.57)			
Uncompleted	-0.074			
primary	(0.38)			
Years of		-0.006	0.011*	0.01*
education		(0.07)	(0.02)	(0.02)
Social class				
Owner of larger	-0.04		0.11	0.30**
business	(0.82)		(0.36)	(0.00)
Entrepreneur	0.32**	0.04	0.085	0.29**
(owner of	(0.002)	(0.91)	(0.29)	(0.00)
smaller business)				
Professional	-0.03	0.03	0.069	0.04
	(0.57)	(0.28)	(0.16)	(0.44)
Government or	0.08	0.15	-0.01	-0.029
SOE official	(0.17)	(0.19)	(0.88)	(0.72)
Clerical worker	0.03	0.21	0.01	-0.018
	(0.35)	(0.09)	(0.89)	(0.75)

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Variable	1988	1995	2002	2013
Ownership of				
place of work				
Collective	0.03	0.05	0.11	0.03
ownership	(0.37)	(0.16)	(0.15)	(0.74)
Private	0.05	0.015	0.10*	0.01
	(0.56)	(0.90)	(0.02)	(0.77)
Foreign	0.05	0.15	-0.04	0.11*
	(0.40)	(0.90)	(0.62)	(0.04)
Other	0.06	-0.118	-0.134	-0.02
	(0.33)	(0.33)	(0.39)	(0.79)
Region				
East	-0.034	0.105**	0.06	0.09**
	(0.22)	(0.002)	(0.24)	(0.01)
West	-0.055	0.04	-0.013	-0.02
	(0.16)	(0.32)	(0.84)	(0.68)
CCP membership	0.09	0.009	0.026	-0.09
	(0.07)	(0.86)	(0.72)	(0.22)
CCP membership				
interacted with:				
Private sector	•••	0.10	-0.20	0.34*
owner		(0.48)	(0.32)	(0.04)
Individual sector		0.05	-0.04	-0.083
owner (self-		(0.82)	(0.84)	(0.58)
employed)				
Professional	-0.076	0.024	-0.07	0.04
	(0.27)	(0.69)	(0.42)	(0.63)
Government	-0.14	-0.023	0.085	0.09
high official	(0.09)	(0.72)	(0.38)	(0.48)
Employee	-0.07	-0.065	0.11	0.09
	(0.26)	(0.33)	(0.23)	(0.35)
Constant	8.50**	9.82**	10.1**	11.2
	(0.00)	(0.00)	(0.00)	(0.00)
R <sup>2</sup>	0.07	0.06	0.07	0.11
(F)	(2.8)	(2.6)	(1.8)	(4.9)
N	977	785	499	688

Note: The omitted category is worker employed in the state sector in the Central region (professional school graduate for the years where number of years of education variable is not available). *p*-values between parentheses. \*\* (\*) indicates significance at 5 (1) percent level. All are weighted regressions run with survey sample weights.

## Section VI. Conclusions

Economic and social transformation of China over the period of the past 40 years is without precedent in human history. While the economic transformation was extensively studied, social transformation was not. In this paper, we use for the first time harmonized household surveys covering the period 1988-2013 to study the changes in the characteristics the richest 5 percent of China's urban population.

We study the changes along several vectors: type of income the elite receives (wages, property, business or transfers), its social (class) composition, education level, and regional distribution (East, West, Center). We find dramatic charge in the social composition and educational level of the elite. While in 1988, three-quarters of the elite members were high government officials, clerical staff, or workers, in 2013, the single most important group were professionals, and they, combined with small and large business owners, accounted for over one-half of all elite members. There was more than a ten-fold increase in the share of elite income that comes from the private sector. The education level of the elite has also dramatically increased. 44 percent of elite members are university-educated in 2013 compared to only 12 percent in 1988. The increase in the educational attainment of the elite is not solely the result of the rising level of education overall in urban China. It is much more significant than that, and is driven by higher returns to education and greater selection into the elite by the educated.

The regional composition of the elite has not changed very much though. All three regions show very similar transformation, but the outcome of that is that the regional distribution of the elite has been fairly unaffected: Eastern regions accounted for 69 percent of the elite income in 1988 and for 73 percent in 2013. This implies that the huge changes in China did not have as much of a regional dimension, as far as the elite is concerned, as is often argued. The regional elite gaps were present even under a very different system that existed in the 1980s.

Our data allow us also to look at the importance of CCP membership for people's income. China is unique among countries in providing a distinctly political variable in addition to

other individual and group variables. When we compare social composition of urban CCP membership with that of China's urban population, we find that the two are now more similar than they were in 1988. This may be thought to reflect an effort by the Party to more equally represent different social groups. But when we compare CCP members who are among the richest 5% of China's urban population to overall CCP membership, we find rising discrepancies. In fact, CCP members who are professionals or private businesspeople tend to be significantly over-represented among the rich compared to their percentages among CCP membership. We thus notice a movement among the rich part of the Party members further away from the rest of the CCP membership as well as from the rest of the urban population.

These results are confirmed when we look at the returns to CCP membership. It is, after controlling for other relevant factors, positive, at 5% in 2013. But for private sector owners who are among the top 5%, it is even much more valuable, adding 34 percent to their income.

Our results show both a dramatic change in the Chinese urban elite over a relatively short period of time and significant, albeit less dramatic, change in the composition of CCP membership and in its rich top. Today's China's elite is much more educated and more dependent on private sector incomes than in the 1980s. If one were to succinctly characterize the change, it could be said to have consisted in more widespread education, rising returns to education despite its quantitative expansion, and "professionalization" of the elite.

### REFERENCES

Allen, Robert (2017), "Class Structure and Inequality during the Industrial Revolution: Lessons from England's Social Tables, 1688-1867", draft.

Bian, Yanjie (2002). "Chinese Social Stratification and Social Mobility". *Annual Review of Sociology*, 28: 91-116.

Bian, Yianjie et al. (边燕杰,主编). (2002) 市场转型与社会分层: 美国社会学者分析中国 [M]. 北京: 生活·读书·新知三联书店. [Market Transition and Social Stratification: American Scholars'Analysis of China]. Beijing: SDX Joint Publishing Company.

Brandt, Loren, Hsieh Changtai, and Zhu Xiaodong. 2008. "Growth and Structural Transformation in China. "In China's Great Economic Transformation. Edited by Loren Brandt and Thomas G. Rawski. New York: Cambridge University Press.

Brzezinski, Zbigniew (1962). *Ideology and Power in Soviet Politics*. New York: Praeger.

Cabestan, Jean-Pierre (2019), Demain la Chine: démocratie ou dictature?, Paris: Gallimard.

Calomiris, Charles W., Raymond Fisman, and Yongxiang Wang (2010). "Profiting from government stakes in a command economy: Evidence from Chinese asset sales." *Journal of Financial Economics* 96.3: 399-412.

Chen, Jie, and Bruce J. Dickson (2010). *Allies of the state: China's private entrepreneurs and democratic change*. Harvard University Press

Chen, Ting, and James Kai-sing Kung (2018). "Busting the "Princelings": The campaign against corruption in China's primary land market." *The Quarterly Journal of Economics* 134.1, pp. 185-226.

Ding, Haiyan and Hui He (2018), "A tale of transition: An empirical analysis of income inequality in urban China, 1986-2009", *Review of Economic Dynamics*, vol. 29, pp. 108-137.

Djilas, Milovan (1957). *The New Class: An Analysis of the Communist System of Power*. New York: Praeger.

Dahrendorf, Ralf (1959), *Class and Class Conflict in Industrial Society*. Stanford, Calif.: Stanford University Press.

Dickson, Bruce J. (2003), *Red capitalists in China: the party, private entrepreneurs, and prospects for political change*, Cambridge: Cambridge University Press.

Eyal, Gil, Ivan Szelényi, and Eleanor Townsley (1998). *Making Capitalism without Capitalists: Class Formation and Elite Struggles in Post-Communist Central Europe*. London: Verso.

Fan, Joseph PH, Tak Jun Wong, and Tianyu Zhang (2007). "Politically connected CEOs, corporate governance, and Post-IPO performance of China's newly partially privatized firms." *Journal of financial economics* 84.2, pp. 330-357.

Fisman, Raymond, Jing Shi, Yongxiang Wang, and Weixing Wu (2019). "Social Ties and the Selection of China's Political Elite", working paper

Goodman, David (2014), Class in Contemporary China, Cambridge (Mass.): Polity press.

Guo, Di, Kun Jiang, Byung-Yeon Kim, and Chenggang Xu (2014). "Political economy of private firms in China." *Journal of Comparative Economics* 42, no. 2, pp. 286-303.

Harvey, David (2007). A brief history of neoliberalism. Oxford University Press

Higley, John (2018). "Continuities and discontinuities in elite theory." *The Palgrave Handbook of political elites*. Palgrave Macmillan, London, 25-39.

Huang, Yasheng (2008), *Capitalism with Chinese Characteristics: Entrepreneurship and the State*, Cambridge University Press.

Inkeles, Alex (1960). "Social Stratification and the Modernization of Russia." pp. 338-50 in *The Transformation of Russian Society*, edited by C. Black. Cambridge, MA: Harvard University Press.

Kaelble, Hartmut (1981). *Historical research on social mobility: Western Europe and the USA in the nineteenth and twentieth centuries*. Taylor & Francis.

Landry, Pierre Francois (2008). *Decentralized Authoritarianism in China: the Communist Party's control of local elites in the post-Mao era*. New York: Cambridge University Press.

Li, Cheng (2016). *Chinese politics in the Xi Jinping era: Reassessing collective leadership*. Brookings Institution Press.

Li, Cheng (2018). "The Political Elite in China: A Dynamic Balance Between Integration and Differentiation." *The Palgrave Handbook of Political Elites*. Palgrave Macmillan, London, 295-314.

Li, Hongbin, Lingsheng Meng, Qian Wang, and Li-An Zhou (2008). "Political connections, financing and firm performance: Evidence from Chinese private firms." *Journal of Development Economics* 87, no. 2 283-299.

Li, S., Luo, C., Wei, Z., and Yue, X. (2008), "Appendix: The 1995 and 2002 Household Surveys: Sampling Methods and Data Description," in B. Gustafsson, S. Li, and T. Sicular, eds., *Inequality and Public Policy in China*, pp. 337-353, New York: Cambridge University Press.

Lin Thung-hong 林宗弘 (2007). 城市中国的无产化: 中国城镇居民阶级结构的转型与社会不平等, 1979-2003 [J]. 台湾社会学(14): 101-153. ["Proletarianizing Urban China: The Changing Class Structure and Social Inequality: 1979-2003"]. *Taiwanese Sociology* 14: 101-153. (in Chinese)]

Lin, Thung-hong (2008). "Social Classes in China: An Analysis of China's Transition to Capitalism". PhD dissertation. Hong Kong University of Science & Technology.

Lin, Thunghong, and Wu Xiaogang (2010). "The transformation of the Chinese class structure, 1978–2005." Social Stratification in Chinese Societies. BRILL, pp. 81-112.

Liu Xin 刘欣 (2007). 中国城市的阶层结构与中产阶层的定位 [J] . 社会学研究(6) ["Class Structure of Urban and Positioning of Middle-Class in China"] *Sociological Studies* 6. (in Chinese).

Lu Xueyi 陆学艺,编. (2002). 当代中国社会阶层研究报告 [M]. 北京: 社会科学文献出版社 [Research on Contemporary Chinese Social Stratification]. Beijing: Social Sciences Academic Press.

Lu Xueyi 陆学艺,编. (2004) 当代中国社会流动 [M] . 北京: 社会科学文献出版社. [Social Mobility in Contemporary China]. Beijing: Social Science Academic Press

Lu Xueyi 陆学艺,编. (2010). 当代中国社会结构 [M] . 北京: 社会科学文献出版社. [Social structure of contemporary China]. Beijing: Social Science Academic Press.

Lin Thung-hong and Wu Xiao-gang 林宗弘, 吴晓刚 (2010). 中国的制度变迁、阶级结构转型和收入不平等:1978-2005, 《社会》第 30 卷, 第 1-30 页。 [Institutional Changes,

Class-Structure Transformation, and Income Inequality in China, 1978-2005], Shehui, V30, P.1-42.

Jia, Ruixue, Masayuki Kudamatsu, and David Seim (2015. "Political selection in China: The complementary roles of connections and performance." *Journal of the European Economic Association*, 13.4, pp. 631-668.

Kanbur, Ravi and Xiaobo Zhang (2018), "The Great Chinese Inequality Turnaround", mimeo, version 6 August 2018.

Konrad, Gyorgy and Ivan Szelényi (1978), *Intellectuals on the Road to Class Power*, Harcourt Brace Jovanovich.

Kung, James Kai-sing, and Chicheng Ma (2018). "Friends with benefits: How political connections help to sustain private enterprise growth in China." *Economica* 85.337, pp. 41-74.

Matthews, Mervyn (1978). *Privilege in the Soviet Union*. London, England: Allen and Unwin.

Moore, Barrington, Jr. (1944). "The Communist Party of the Soviet Union: 1928-1944. A Study in Elite Formation and Function." *American Sociological Review* 9:267-78.

Milanovic, Branko (1989), Liberalization and Entrepreneurship,: Dynamics of Reform in Socialism and Capitalism, New York: M.E. Sharpe.

Milanovic, Branko (2019), *Capitalism, Alone*, Cambridge (Mass.): Harvard University Press.

Pei, Minxin (2006), China's trapped transition: the limits of developmental autocracy, Cambridge (Mass.): Harvard University Press.

Persson, Petra, and Ekaterina Zhuravskaya (2016). "The limits of career concerns in federalism: evidence from China." *Journal of the European Economic Association*, 14.2, pp. 338-374.

Piketty, Thomas, Li Yang and Gabriel Zucman (2017), Capital Accumulation, Private Property and Rising Inequality in China, 1978-2015, WID.world Working Paper series 2017/6.

Polanyi, Karl (1944). *The Great Transformation: The Political and Economic Origins of Our Time*. Boston: Beacon Press

Roland, Gerard (2017). "The evolution of post-communist systems: Eastern Europe versus China", mimeo.

Song McLaughlin, Joanne (2017), ""Does Communist Party Membership Pay? Estimating the Economic Returns to Party Membership in the Labor Market in China", *Journal of Comparative Economics*, vol. 45 No. 5.

Szelényi, Ivan (1986). "The Prospects and Limits of the East European New Class Project: An Auto- Critical Reflection on The Intellectuals on the Road to Class Power." *Politics and Society* 15, pp. 103-44.

Trotsky, Leon [1937] 1972. *The Revolution Betrayed: What is the Soviet Union and where is it going*? Reprint, New York: Pathfinder

Voslensky, Michael (1984). *Nomenklatura: The Soviet Ruling Class*. Garden City, NY: Double-day.

Walder, Andrew G. (1995), "Career mobility and the communist political order." *American Sociological Review*, pp. 309-328.

Walder, Andrew G., Bobai Li, and Donald J. Treisman (2000). "Politics and life chances in a state socialist regime: Dual career paths into the urban Chinese elite, 1949 to 1996." *American Sociological Review*, pp. 191-209.

Wodtke, Geoffrey T. (2016), "Social class and income inequality in the United States: Ownership, authority, and personal income distribution from 1980 to 2010." *American Journal of Sociology* 121, no. 5, pp. 1375-1415.

Wright, Erik O. (1979), *Class Structure and Income Determination*. New York: Academic Press.

Wu, Ximing and Jeffrey Perloff (2005), "China's income distribution and inequality", *Review of Economics and Statistics*, vol. 87, No. 4, November, pp. 763-775.

Xie, Yu and Xiang Zhou (2014), "Income inequality in today's China", *Proceedings of the National Academy of Sciences*, Washington, D.C.

Zhuang, Juzhong and Li Shi (2016), "Understanding Recent Trends in Income Inequality in the People's Republic of China", ADB Economics Working Paper Series, No. 489, July 2016.

Wu, Ximing and Jeffrey Perloff (2005), "China's income distribution and inequality", *Review of Economics and Statistics*, vol. 87, No. 4, November, pp. 763-775.