

Economic Growth of China in Light of Principles of Democracy

Yury Abrukin

Email: yabrukin@gmail.com

Abstract:

In article “Productivity and Democracy in Terms of Theory of Control – Systems Approach”[1] was introduced definition of “principles of democracy”. It represents democracy, which provide feedback in terms of theory of control from/to of government on state level from/to workforce on production level and forms motivation for productive work by use of psychological factors. This feedback represents democratic freedoms which provide access workforce to production, distribution and consumption taxes. Because of the economic nature of democratic freedoms, they were defined as principles of democracy. This work analyses the influence of principles of democracy on unprecedented economic growth of China. It was found that one party political system contrary to multiparty democratic system (as widely accepted meaning of democratic society) is able to provide access workforce to production, distribution and consumption taxes, achieving productivity growth (name it Access). The definition of rule of dependency productivity realizing principles of democracy has to be complemented by inclusion of business and capital owners to whom principles of democracy also create (beside need to stay on market) motivation for growth productivity, to realize systems approach.

Keywords: Democracy, Taxes, Economic Growth, China, Principles Of Democracy

To prove that democracy in general, and principles of democracy particularly are working, we need to take a look on example of China’s economics, which demonstrate stable economic growth 8-12% for last 30 years. It started with decision of governing body of China - Communist Party to allow private property and opening capitalist enterprises. The legislation was created to allow this type of property. In article “China Economical Success Proves the Power of Capitalism” [9], the author refer on opinion famous Chinese economist Zhang Weiying “ ...The reason that China could sustained economic growth during the process of reform was that the government managed less and the proportion of state -owned enterprises decreased, not other way around. It was precisely the relaxation of government control that brought about market prices, sole proprietorships, town and villages enterprises, private enterprises,

foreign enterprises and other non-state owned entities.” R. Zitelmann [9] made a remark, that “Taken together all this formed the basis for China’s unprecedented economic rise.” As we see from both observations, the relaxation of government ruling and decreasing state enterprise involved in production the huge number of workforces via different type of ownerships. All together it let us apply the one part of rule of productivity growth mentioned above - it is dependency workforce on access to produce taxes. It meant significant increase of huge amount motivated workforce to work productively and as consequence - drastic increase of taxable base in China first and proportional increase of personal income for them - second. Author refers to the figures of World Bank that the percentage of extremely poor people of China in 1981 stood at 88.3%. By 2015 only 0.7% of the Chinese

population was living in extreme poverty. In this period, the number poor people fell from 878 million to less than ten million. This numbers give us the scale how much workforce was involved in productive work in conditions of competitive capitalist work environment and advantages of it.

The most important, phase relaxation of ideological restrictions required modification of law system and its execution on all levels of functioning the state of China. It was completely re-done legal, legislative and justice system to provide Access. As it described in work “Development of a New Legal System in the People’s Republic of China” [2] “China again attempted-for the fourth time in the twentieth century-to develop a new legal system.” ... “The Central Committee of the governing Communist Party asked for the development of a constitutional state.”

The new constitution was developed after consideration constitution from 140 countries. Articles 33-36 proclaimed equality people of China before the law and granted them all democratic freedoms. In article 11 was proclaimed existence of individual and non-public economies, which exist within the limits prescribed by law and are the major component of socialist economy.

Based on constitution was developed legislation, criminal, civil legal and justice system. As we can see further all these efforts contributed to significant result in economic growth of the Republic of China.

The most significant change was made in law of taxation. For individuals tax rate was made varying from 3 to 45%, depends on size of income, with 60000 RMB standard deduction according “People’s Republic of China Tax Facts and Figures, 2020, PWC”. For tax residents enterprises (TER) was created concept of corporate income tax (CIT). Accordingly, was established standard CIT rate equal 25%. For some corporations or TER which state considered important from point industrial development in some areas of country was established reduced tax rate of 15%, and for some special software and IC enterprises was set rate

10%. This one (progressive taxation and introduction of standard deduction for individuals) along with increasing size of workforce involved in production (allowing individual and non-public enterprises) and along with fixed stimulating rate TER produced exceptional result in creation taxable base and increase of demand for consumption from population and businesses. It helped to develop internal market, which provided economic growth.

The important parts of model for distribution and consumption taxes on the level of state related to workforce, between others, should include pension, healthcare and education systems. According work “The Chinese Pension System” [4] development of pension system has gone via several phases. One of them lasted thru early 1990s to the late 2000s. This period development is characterized that China ... “adopted a three-pillar pension system for urban employees to deal with population aging and SOE’s (state owned enterprises) growing pension burden. The new system was called Basic Old Age Insurance (BOAI) insurance. The first pillar was the PAYG (Pay-As-You-Go) system financed by employers, the second pillar was the notional employee account financed by employees contribution

(employees pay 8% of wages to the individual account system), and third pillar was voluntary retirement savings”.... For this period of time (1995- 2010), according table 6 GDP annual growth was 9.9%, labor productivity growth 8.9%. We can observe, that new approach to the pension one way or another did not harm steady economic growth of China.

In 2009, pension system coverage extended to non-SOE firms....” To achieve universal coverage, the New Rural Resident Pension (NRP) scheme was established in 2009 to cover rural residents, and the Urban Resident Pension (URP) scheme was established in 2011 to cover urban non-employed. The Social Insurance Law enacted in 2011 stipulates that rural migrant workers are to be given the same treatment as that given to urban workers” ... The BOAI system has steadily increased its coverage in recent decades. ...“As of

the end of 2017, Chinese public pension schemes had more than 915 million participants (accounting for 65.8% of the total population), and the total public pension expenditure was 4,032 billion RMB, about 5% of China's GDP". For this period of time GDP annual growth 8.6%, and labor productivity 8.3%.

Healthcare system represents another factor which may potentially affect of motivation for productivity growth, originating from tax distribution. The work "China's health system reforms: review of 10 years of progress. What can we learn from China's health system reform?" [7] provides some insight in this area. The Chinese central government started a first round of health system reform in 1996. The effectiveness of the reform was questioned after several years of implementation for a number of reasons. The major problem was that large proportion of the population could not afford the healthcare, they needed.

After several serious failures of the healthcare system for period 1996 -2005 was raised issue of the importance of health for human development, and the government began to recognize the contribution of the health system to overall social and economic development.

..“In March 2009, the Central Committee of the Communist Party of China and the State Council issued the *Opinions on Deepening Health System Reform*. The aim of the reform was to establish an equitable and effective health system for all people (universal health coverage) by 2020 by strengthening healthcare delivery, health security, and provision of essential medicines” ...China created ... “a three-tiered system for healthcare delivery: health organizations and providers which operate at county, township, and village levels in rural areas, at municipal, district, and community levels in urban areas” ... and... “employee-based health insurance funded by employer and employee contributions”. ...” The public health sector is the main healthcare provider” ...” In 2017, 82% of inpatient care was provided by public hospitals. The health insurance schemes—rural and urban resident-based health insurance, which is funded

mainly by government subsidies (about 70% of the total funds)”.
... “China's health system reform in the past decade covered five main areas: social health security, essential medicines, primary healthcare, basic public health service package, and public hospitals. The reform policies were designed to tackle access to healthcare and financial protection” “Removing mark-up on drug prices as a source of financing for health providers is an important part of the policy reform on essential medicines”.

...” Strengthening the capacity of the primary healthcare system—mainly the rural village clinics, town health centers, and urban community health stations and centers—has been a priority of the reform. The government has made large investments and issued policies to attract and retain qualified health professionals in the primary healthcare system”.

...” “The purpose of the basic public health service package is to provide everyone with a defined healthcare package, regardless of income, residence, or other characteristics. The package is financed by a government per capita allocation mainly from the central government for low-income provinces, and from local government (provincial and county) for high income provinces. The values of the fund and the package are adjusted every year”.

....” Financial contributions for health from government and through the social health security system have increased. Total health expenditure as a proportion of the gross domestic product changed little between 2000 and 2008 (4.57% in 2000 and 4.55% in 2008), but increased from 5.03% in 2009 to 6.36% in 2017”. ...” Insurance system increased rapidly and accounted for 42% of total health expenditures in 2017. Extended coverage of the population through social health insurance schemes and increased availability of healthcare are the main reasons for the greater accessibility to healthcare. Allocation of government subsidies is mainly based

on service volume and activities rather than health outcomes. In addition, health resources are skewed to the hospital sector rather than primary and preventive care, although these two services are important determinants of efficiency”” In 2016, the rate of hospital admission in China was 16.4%, higher than the average for countries of the Organization for Economic Cooperation and Development, which implies that China needs to examine the appropriateness of inpatient care, including overuse and misuse of healthcare services”.

.... “China has implemented a comprehensive health system reform over the past decade which focused on strengthening the capacity of primary care, extending and improving social health insurance coverage, providing basic public health services to everyone, reforming public hospitals, and improving medicines policies. Both central and local governments have mobilized substantial political and financial resources to implement the reform. Almost everyone has been covered by the social health insurance system and basic public health service package. Mark-up of drug prices has been stopped in public hospitals and primary healthcare providers. Unmet health needs and inequities in some health indicators have decreased”.

Another main source of productivity growth as it proven by experience of many developing countries is education population of the country in general, as a base, and workforce by technical, working skills, as source of productivity. In light of our discussion, let take a look on development of education system in China for the last two decades.

The source of China Education Center provided information about main decisions of governing body of China about educational system of China which became a Law inSeptember 1, 2006 [3].

“Compulsory education is education was implemented uniformly by the State and shall be received by all school-age children and adolescents.

It is a public welfare cause that shall be guaranteed by the State.

No tuition or miscellaneous fee may be charged in the implementation of compulsory education.

The State shall establish a guarantee mechanism for operating funds for compulsory education in order to ensure the implementation of the system of compulsory education.

Article 3 In compulsory education, the State policy on education shall be implemented and quality-oriented education shall be carried out to improve the quality of education and enable children and adolescents to achieve all-round development - morally, intellectually and physically - so as to lay the foundation for cultivating well-educated and self-disciplined builders of socialism with high ideals and moral integrity.

Article 4 All children and adolescents who have the nationality of the People’s Republic of China and have reached the school age shall have equal right and have the obligation to receive compulsory education, regardless of gender, nationality, race, status of family property or religious belief, etc.

The State shall integrate the entire compulsory education into the scope of financial guarantee. The operating funds for compulsory education shall be guaranteed by the State Council and the local people’s governments at all levels in pursuance of the law.....

The people’s governments of the provinces, autonomous regions, municipalities directly under the Central Government shall, in light of the actual circumstances of their respective administrative areas, formulate standards on the average public-use operating funds for school students, which shall not be lower than the national standards.”

The article “Education in China”[5] provides very impressive facts and numbers about current educational system Republic of China. ... “China’s own education system has simultaneously undergone an unprecedented expansion and modernization. It’s now the world’s largest education system after the number of tertiary

students surged sixfold from just 7.4 million in 2000 to nearly 45 million in 2018, while the country's tertiary gross enrollment rate (GER) spiked from 7.6 percent to 50 percent (compared with a current average GER of 75 percent in high income countries, per UNESCO). By common definitions, China has now achieved universal participation in higher education".

China's education system is largest in the world. With almost 260 million students and over 15 million teachers in about 514 000 schools (National Bureau of Statistics of China, 2014), excluding graduate education students. Following the policy of providing per-schooling education by the state, collective bodies, citizens and individuals and developing through multiple channels in various forms, pre-school education in China has made significant progress. In 2019, there were 281,174 kindergartens with an enrollment of 47,138,810 young children. Per-school education has been generally universalized in big and middle-sized cities.

Influence of high education on motivation for productive and consequently rewarding work is reflected in the article..."China's middle class, likewise, has been growing at a breathtaking pace—a trend that helped fuel the recent leaps in higher education participation and outbound student mobility. By some estimates, the number of urban middle-class households in China—defined as those earning between USD\$9,000 and USD\$34,000 a year—will increase from just 4 percent in 2000 to 76 percent, or more than 550 million people, by 2022".

All mentioned above examples of distribution budget (pension, healthcare and education), which mainly formed from taxes, give us ground to consider them as psychological factors of motivation workforce of China to work productively. Beside that they have one common – access to them provided for population in general and workforce particularly of Republic of China via decisions of governing body (Communist party of China) thru Constitution as a base and further the

changes in legislation, legal and justice system for Access to taxes. It allows us to conclude that exist connection of such significant productivity and economic growth by 8-12% and timeframe when these changes happened (1985 – 2020). This result does not look like accident, but fall in category of casual relationship. We can conclude that these results realized by use of principles of democracy, even there is some specific - principles of democracy, may not include multiparty system as the most valuable and necessary part of democracy, in widely accepted meaning of it. Only explanation could be made that exist necessary and sufficient condition for economic growth, as far as principles of democracy provide Access to taxes using legislative, legal and justice system as feedback between governing body and workforce.

There are different approaches to explain phenomenon of China economic growth. One of them was presented in referred above article of R. Zitelman, that economic growth was provided by implementing capitalist system based on idea of economist Zhang Weiyang, that capitalist approach based on relaxation of ideological restrictions of communist regime, which brought wide spectrum democratic transformation. Only remark can make that China is not capitalist country under ruling of Communist party.

Economist Yao Yang in research "China's Economic Growth in Retrospect" [8] analysed other possible drivers for explanation of China's economic growth. One of them, author considered influence of development heavy industry on development and achievements country's economy. He referred at work Yao and Zheng (2008), which provided ..."of an assessment by calibrating a dynamic general equilibrium model to China's real data. They found that there should be an optimal rate (31 percent) and an optimal length (twelve years) of subsidy provided to heavy industry because heavy industry possesses distinctive technical externalities coming out of roundabout production (in roundabout production, capital goods are produced first, followed by consumer goods).

Compared with the optimums, the rate of subsidy implemented by the planning period was 6.6 percentage points higher than the optimal rate and the period of subsidy was thirteen years longer than the optimal length”.

As another driver of growth, author referred to improvement “the level of education and health of ordinary citizens” ...and because of this...” China’s approach paid off in its early stage of economic growth, when a large number of unskilled workers were needed for economic development. China began to expand its higher education after 1998, and this corresponded to China’s entry into the middle-income stage (China became a middle-income country in 2002), when more skilled workers were needed. To be sure, China’s initial approach to human capital improvement was not designed to push for economic growth but to improve equality for the population. Nevertheless, this approach contributed significantly to the country’s economic take-off”.

Author paid attention that demography may be the factor of growth ...”In the long run, demography trumps other factors in its effect on a country’s growth potential. Whether China is able to meet its second centennial goals depends critically on how successfully it mitigates the negative consequences on economic growth of an aging population”.

Next, author considered significant role of savings and investment undertaken by government policy as basis for economic growth. Along with creating favourable conditions for private enterprises that helped to involve in production hundred million young people from countryside and made tremendous contribution to China export-led growth and industrialization.

The author analysed the use of different mathematical models to explain economic growth.

He found that ..” plausible theory providing a unified explanation for all five periods of China economy growth is Franco Modigliani’s life-cycle hypothesis. One of the most important propositions

to emerge from the life-cycle hypothesis is that a country’s national saving rate is proportional to its GDP growth rate. In his last published paper (Modigliani and Cao 2004), Modigliani and his co-author applied this proposition to explain the changes in China’s national saving rate since 1950. They found that China’s rising GDP growth rate could provide a good explanation for the rising saving rate after 1978. In the same vein, they attributed the rising saving rate during the fourth period (2001–2010) to accelerated growth, and its subsequent decline after 2010 they considered to be a result of decelerated growth. Related to China’s high savings is an international debate over China’s contribution to global trade imbalances. However, precautionary saving motives cannot explain why the saving rates, including the household saving rate, declined in the third period when the old enterprise-based social security system was basically broken because of SOE restructuring. And housing prices cannot explain why the saving rates, again including the household saving rate, declined in the fifth period, from 2011 onward”.

Special attention by author was brought to idea of total factor productivity. He brought attention to point of view ...” that China’s economic growth has been driven solely by capital accumulation” and econometric calculations the Solow residual coincided with this view. He takes in consideration results of many studies in 2012 that ...”the growth of China’s total factor productivity (TFP) was only 2 percent per annum and had contributed 20 percent to China’s overall GDP growth since 1978. As per research (Kim and Lau 1996) in advanced economies the contribution is in the range of 40–50 percent”. However, author point it out that... “Solow residual has the problem to take in account technological progress embedded in capital accumulation. It is undeniable that a factory improves its technological efficiency when it installs new, more advanced equipment, yet this improvement is highly likely to be attributed to the growth of capital stock when the Solow residual is calculated because the growth of capital stock is the

first-order event. He suggested different way to calculate Solow residual by the growth in wages and the rate of return on capital (ROC). The results of calculations of TFP were close to requirements to TFP for advanced economies”.

As per view found in article “Solow Residual”[6] - Solow residual represents “the portion of an economy’s output growth that cannot be attributed to the accumulation of capital and labor, the factors of production and the Solow residual is often described as a measure of productivity growth due to technological innovation”. Based on this, author also suggested the view economic growth through the lens of total factor productivity. Because of this, author consider that “China has managed to become an economic superpower through its sheer size rather than through gains in productivity”. This point of view in some degree coincides with opinion some researches provided above.

The model dependency productivity of workforce from Access to taxes gives another explanation the phenomenon of China economic growth. We observed that using reasoning of motivation by use of psychological factors on level of state generated via Access, gives us ground to explain the economic growth of China. It deviates from necessity use the full set widely accepted meaning of democracy, all democratic freedoms, especially the multiparty political system. In this specific case principles of democracy not include multiparty system, as far it provided access workforce to taxes using legal, legislative and justice system to provide feedback between governing body (Communist Party) and workforce and vice versa. Right management decisions developed by governing body created positive feed for work force to work productively and suppressed negative factors creating negative feedback. We cannot dismiss the fact that democratic principles creating such progress are based on authority given and approved by Chinese people to Communist Party.

As far as model of productivity grows was built on result of experiments on productivity [1], the

owners of business and management were involved in the experiments as originators and decision makers along with scientists as observers and analytics. In real life, the owners and management of the company are permanently included in decision making process to survive business on competitive market where productivity is the main factor, along with other factors: like expansion business or reducing it, choose another direction of business and consequently investments which allowed to be productive, which is based on psychological factors as motivation to survive on the market. Their decision-making process is influenced by many factors but the most important by conditions of market which again may be determined by policy of government. Because of this business owners and management also need access mentioned above to increase productivity by using capital for implementing advanced equipment and technology for productive work. In this case the environment to increase productivity on level of production as it was observed in experiment from static become dynamic based on several major factors: surviving and prosper on the market and adapting to conditions created by block of control – governing body of country.

It requires us to complete considered above model productivity on production level and apply systems approach to complement the definition of dependency productivity from access to taxes by formulation that productivity is directly proportional access of workforce and owners of business and capital to production, distribution and consumption taxes. In this case, business owners are responsible for technological environment and innovations driven by necessity to stay and survive on the market and workforce responsible for productive utilization of this environment using their education, physical, mental, cultural abilities and technical skills. Inclusion business owners in system model on production level in terms of generation taxes may have competitive nature and create conflict of interests, whose share and which degree should be applied to production taxes on

state level, forming budget, the on same stage of distribution and consumption them

This concept may be formalized in mathematical model to control one of the major parameters state controlled system - the grows productivity and consequently economic growth of country. It allows to build quantitative model productivity growth based on margin of taxes produced and collected from workforce and companies and distributed and consumed by workforce and related part of population.

9. Zitelman, R. China's Economics Success Proves the Power of Capitalism, Forbes, July 8,2019

REFERENCES

1. Abruken, Y., Productivity and Democracy in Terms of Theory of Control – Systems Approach, International Journal of Scientific Research and Engineering Development (IJSRED -V4I1P52), volume 4/issue 1- 2021
2. Behr, V., 2, "Louisiana law review", Symposium: Law making in a Global World, 2007, volume 67/number 4 summer
3. China Educational Center, Ministry of Education of the People's Republic of China, Law of Education, September 1, 2006
4. Fang, H., Feng, J., 2019 The Chinese Pension System by PRC WP2019-6 Pension Research Council Working Paper, Pension Research Council The Warton School, University of Pennsylvania the China's Public, 2019
5. Gu, M., Michael, R., Zheng, C., Trines, S., Education in China, World Education News and Reviews (WENR) 12.17.2019
6. Kenton, W. Solow Residual, Investopedia, 2021
7. Meng, Q., Mills, A., Wang L., Han Q., China's health system reforms: review of 10 years of progress. What can we learn from China's health system reform? BMJ 2019;365: 12349, June 19,2019
8. Yang, Y. China's Economics Grows in Retrospect, Brooking Institution, 2019