Conception of American Infrastructure Construction Eight-year Plan

Chen-xi WANG¹, Jian-qiang WANG² and Jian-guo WANG³,*

¹Beijing Museum of Natural History, Beijing 100050, China
²Beijing Development and Reform Commission, Beijing 100031, China
³School of Humanities and Social Science, Hubei University of Medicine, Shiyan 442000, China

*Corresponding author

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Abstract. To solve the problem of America huge infrastructure investment demand and its government limited ability, this paper combines both advantages of $1 trillion government investment plan and $10 trillion private investment plan to produce a new version. With the help of policy innovation, America only needs to add $250 billion government debt in the first two years, that can drive $10 trillion private investment to construct 20 thousand km high speed railways and 8 super cities infrastructures in 8 years. It would deliver more than 10 million jobs, create several trillions dollars of tax, double the social wealth and economic growth, and make America enter a period of reducing debt for the first time and enter a new era of the traffic revolution marked by time, speed and efficiency. This conception would be expected to become an American Bill in view of its practical significance. If passed, it will rewrite the history.

Introduction

Commercial genius president Trump put forward the most powerful slogan is "Make America Great Again", and make the most important commitment is American big infrastructure construction. Here the most important thing is who, as a president, found out a historical national opportunity in time. It is well known that in the last 10 years China has built 20 thousand kilometers of high speed railway. This fact is quietly announced that the world is entering a new era of traffic revolution, which is no less important than the industrial revolution, the agricultural revolution and the information revolution.

After the success of the tax reform, trillions of dollars will back flow. Considering money multiplier, the increased money would be astronomical. The problem now is that America lacks enough reservoirs to absorb money. There is no doubt that the first choice of it would be manufacturing industry. But however, because this market is saturated, its capacity is very limited. It's hard to imagine that the new increased factories can reach $1 trillion. Contrarily, a other new huge market and demand of high speed railway has not yet been discovered. To it $10 trillion is too less and would be absorbed easily. Making a rough estimate, the market space of the latter is ten times larger than the former. Without this new market, 90% of the back-flow funds would be stopped, which means 90% of tax reform fruits such as about 9 million jobs, $9 trillion investment and $5 trillion tax will lost. From another point of view, if the best chance of this global dollar back-flow cycle is missed, later want to start big construction is impossible.

The big infrastructure is so important that it can drive all industries development. Without the best infrastructure, it would be impossible to improve American economic strength substantially. Unfortunately, because it is easy to lose, the private do not like to invest it. As the limited capacity, the scale of government investment is very limited.

In March 2017, President Trump put forward a proposal of $1 trillion infrastructure construction plan based on government investment, which reach the maximum limit of the government's afford ability. Under the condition of limited government ability, is there a possibility to magnify the
government effect by ten times? The answer is yes, which is the conception of this paper: use policy innovation, under the condition of the government investment $1 trillion unchanged, to obtain private investment $10 trillion.

In November 2016, when President Trump succeeded in running, the authors of this paper found a good opportunity to submit their ten-year research results on American economy. According to presidential election manifesto, the authors decided to focus on American infrastructure construction to submit an advanced and practical achievement, by means of policy innovation, which make loss projects turned into stable and profitable projects to let government investment guide $10 trillion private investment for big construction. This plan had also sent to President Trump in time in March, 2017.

In June 2017, these research results were published to the international academic conference [1].

On August 8th, 2017, the authors received President Trump's letter. President Trump gave praise, support and gratitude to the authors. In order to thank this support, the authors have been continuing to research and put forward the Conception of American Infrastructure Construction Eight-Year Plan, which would be expected to become an American Bill and rewrite American development history.

Now, America has only one chance, because the president who takes the big construction as his first ruling goal is only one. Moreover, as next presidential term beginning, the construction costs will rise sharply, the global dollar back-flow will have certainly ended and the difficulty will be even greater.

If this plan is successful, America and the world will enter a new historical era, Trump Era.

Here we introduce the main content and various indicators of this conception.

**Plan Time**

American infrastructure construction as a whole project, the time should be neither too long nor too short. Based on the habit of decimal system, many countries have 5-year plan, but it can not be applied in America. Because its presidential term is 4 or 8 years and different president has different economic policies, America has only two choices of 4 or 8 years. Because big station, bridge or tunnel construction is usually taken 5~6 years, 8 years is the only one choice for plan time.

**The Scale of Investment**

Because the leading part of all industries is the infrastructure, the scale of infrastructure investment is the most important determining factor whether America can be strong again. For this reason, within American capabilities the greater the investment the better economy will be.

Here, we had to compare the investment scale with the other countries. The first comparison object must be China. American GDP is 80% more than China, thus its infrastructure investment must be more than China. Otherwise, its contribution to economic development would be very limited.

Today an authority document proves this conception of $10 trillion plan once again. Document [2] is disclosed by China government in November 2017. China one Belt and one Road investment will reach $10.6 trillion in 5 years. Considering the time of 8-year plan is longer than 5-year plan and that American infrastructure being national project but China one Belt and one Road being only a small part of national project, as a result, the scale of American $10 trillion is not big. It should be thought a lower limit.

China spent 10 years built 20 thousand km high speed railway. China can, why America can not?

**The Key to the Problem is Money; the Best Solution is New, Completely New, not Old One**

All the problems of infrastructure construction can be attributed to one word: money. The best solution is also one word: new, the policy innovation, completely new, not old one. Policy innovation is a combination of dozens of new methods, which is a large influence on the economy. This task needs to establish a High-Tech government department: National Development and Reform
Commission. The condition of the task only needs the talent and the experience, and pays for wages and research funds.

**The Government only Increased $250 Billion Debt to Drive $10 Trillion Private Investment**

Government funds are very precious. If built first the high speed railway and the new cities, a large amount of new tax will provide a continuous supply of money for the old infrastructure repairing. If repair first the old infrastructure, the funds will soon run out and the task will be forced to terminate. The following analysis shows that the new plan will produce about $5 trillion tax, but this tax is produced in later years of plan implementation. The government needs to increase the government's $250 billion debt for the first two years. After that, this tax will be greater than the government's investment.

**Strive for the Common Support of the Two Parties of the Republican and the Democratic**

Through proper policy innovation, the growing wealth will be allocated by the government to all classes and all people, for example, doubling the income and living space for the low income people to improve social security, improving the yield of investors, beautifying the environment, running schools, reducing the government debt, etc. in this way, There will be a growing number of followers and supporters of policy innovation. They are not only powerful economic forces, but also powerful political forces. Thus this work will be increasingly easily to do. The infrastructure proposal is supported together by Republican, Democratic parties and most people, which is very rare and reflecting strong market demand. It not only means great economical value, but also means great political significance. So the bill should strive for the common support of the two parties of the Republican and the Democratic.

**A New Combined Version of $1 Trillion Plan and $10 Trillion Plan**

The $1 trillion government investment plan and the $10 trillion private investment plan can be perfectly combined to form a new version, with the cooperation characteristics of government and private investment, named: “American Infrastructure Construction Eight-Year Plan”. Main points are as follows:

1. The amount of money of infrastructure investment of $1 trillion applying to Congress remains unchanged. The change is money usage and payment time. The money usage is not a direct investment, but a subsidy for private investment. The $1 trillion is not a lump sum payment, but an 8 years installment payment. In the way of a subsidy of about $125 billion each year, the government will obtain $10 trillion of private investment. For such a $10 trillion big infrastructure project, the government pays only $125 billion each year, which is very cost-effective to the government and is easily approved by Congress.

[Notes] According to the above analysis, it is roughly estimated that American $10 trillion investment of the Eight-Year Plan is still a very small plan. But from another perspective, many Americans will think this goal is unable to complete, this is because America have no big infrastructure project for many years, and the $10 trillion is seemed simply an unimaginable astronomical.

Where is the problem? This is because America is a developed country, which is a consumption driven economic model, not an investment driven model. The deeper reason is that the economy of developed countries has saturated, and the economy of developing countries is in a non saturated state.

The solution of the problem: According to the theory of economic development saturation, if the developed countries want to get a higher economic growth, they must break the saturation and turn their country, at least in a special industrial area, into developing model [1]. If saturation state is
broken, this $10 trillion would be thought very small. Here the infrastructure is chosen as this kind of area, see below.

From another point of view, if $1 trillion of government investment is all used to subsidize bank interest of private investment, based on the interest rate 2%~2.5% and subsidize time 4~5 years, which approximating one presidential term, the maximum allowable private investment would be $10 trillion. In other words, this $10 trillion is also an investment plan upper limit. In case the subsidy exceeds the upper limit, it will cause great pressure and risk to the subsidy itself.

Above we discussed that $10 trillion is a lower limit of the plan. Here we find an upper limit which is also $10 trillion. At this point, we can be sure that $10 trillion is a more accurate and more practical plan index, which is a goal that can be achieved but needs great efforts to achieve it.

Unlike China, America is a poor government and rich people. Therefore, the main investor in America must not be government, but private. In the way of the government paying only $125 billion each year as interest or profit subsidies and adding measures of policy innovation and business skills, under the combined action of these three ways, this infrastructure construction can be turned into a profitable project and can make investors willing to invest it. Based on 2%~2.5% interest rate and subsidy time 4~5 years, the $1 trillion subsidy can meet the $10 trillion investment. In this way, American government will be able to obtain $10 trillion by means of promises to pay for $125 billion each year.

2. The government promise to invest $1 trillion, but the actually added debt only $250 billion. Within 8 years, if the plan of $10 trillion of private investment guided by the government is successful, the investment will first into construction industry, manufacturing, service and consumption. Finally, the most part of it about $5 trillion will become into tax. This tax would be 5 times more than the government investment promised. So America is able to promise to invest $1 trillion by adding $250 billion debt. This is American economic strength and confidence, it is the guarantee of victory, which is very important.

[Notes] Here, we find that American government would not only lose no money, but also make big money in this plan. Therefore, unlike tax reform, this plan does not require Congress to pass a proposal adding $1.5 trillion to the country's debt during the next decade. It is required only adding $250 billion debt as starting money, because there is not new tax in the first two years of implementing plan. After that, these new taxes can not only pay for the promised investment, but also reduce the government debt.

3. Establish the mechanism of infrastructure investment stable profit. This mechanism is the combination of government subsidies, policy innovation and business skills in three aspects: early-stage based on government subsidies, medium--stage based on policy innovation and later--stage based on business skills, which is a bit like a relay race. The policy innovation must be neither too much nor too less, which is needed not only to make enough profit, but also to prevent overheated investment.

In order to achieve this goal, the operation of policy innovation is required with the ability of high technology and sensitive control, proceed or step back freely, easy or tightening moderately. Although its high difficulty, it's worth to do because it involves trillions of dollars of national interests after all.

[Notes] If the innovation is too much, resulting in infrastructure investment profit too much, the prices of infrastructure investment will rise sharply, that is bad for later-stage investment. On the contrary, if the policy innovation is too less, it will lead to a large loss, that is bad for the early-stage investment.

4. Major projects: In the next eight years, with a total investment of $10 trillion, mainly to construct 20 thousand km high-speed railways trunk lines and 8 super cities infrastructure.

Aim at doubling the economic growth and the government receipts, adding more than 10 million jobs, substantially saving travel time and improve the whole society living quality and overall work efficiency, substantially increasing public wealth, making America enter the period of reducing government debt.
The Key Project is 20 thousand km high speed railway. We must make every effort to ensure its completion in 8 years, in order to form a fast, convenient, cheap and safe high-speed nationwide transportation network, and to lay a solid foundation for the rapid economic development in the future.

**Notes** Make one plan, but phased implementation in 8 years. The general objectives of this plan must be clear and accurate, because the later work of design, organization and implementation, institutional establishment, staffing must be configured in accordance with this general objectives.

Which is the most important of the high speed railway, motorway and plane? Only Chinese passengers can correctly answer this question: the importance of high speed railway is ten times than the latter! Yes, ten times! Unfortunately, other ones do not realize it at all and do think the reply to be unexpected. They do not realize that the world is entering a new era of traffic revolution and that the cars and planes are becoming antiques. America is used to be famous by “the country on automobile wheel” for its speed and efficiency, but this advantage is becoming disadvantage day by day. When the new wheel with 5 times faster comes out, if wants to stay advanced, America needs to become “the country on high speed railway wheel”. The new speed means not only higher economic growth, but also great wealth.

5. Target and effect. Because of the scale of investment is directly proportional to tax, jobs and social wealth, suppose that $1 million investment delivers 1 job and $500 thousand tax, so the $1 trillion will deliver 1 million jobs and $50 million tax, which means in the future increasing $50 million government debt; the $10 trillion will deliver 10 million jobs and $5 trillion tax, which means that America enters a historical period of reducing debt for the first time, which will probably rewrite the history of American development. So it can be said that under the condition that the government pays $1 trillion unchanged, whether to drive the private $10 trillion successfully is the key to America Strong Again.

6. Switch the mode of economic development from the consumption driven model to the investment driving mode, from the ordinary type of economic growth rate to the higher economic growth rate.

**Notes** Developed countries and developing countries have different ways of creating wealth, which is the fundamental reason for the difference in GDP growth between them. Just as two companies, one depends on “to make products - to sell products” to make money and the other depends on “to invest to set up enterprises - to sell corporate stocks”. The latter money would be dozens of times than the former.

But however, just as only few company shares can be listed on the stock exchange, the earning chance using the difference between the former and latter investment is also very rare for a country. Fortunately, this great historic opportunity has been found and seized by the current president, Trump.

The dollar inflow being greater than outflow will certainly drive up the infrastructure assets prices rising continually, which is the best opportunity for America to start huge capital operation.

7. Establish the mechanism of policy innovation and balancing of interest. Not only to create huge wealth, but also to achieve wealth transfer and benefit sharing for all walks of life and everybody. Explore the long-term mechanism of subsidies; and make the high-speed railway is the most popular means of welfare and mass transportation for the middle and low income.

**Notes** The high speed railways can certainly, at least, double the house prices of all cities along the line. There is no doubt that the wealth created by the “High-speed Railways + Super Cities Network” is mainly concentrated in the real estate industry, the other industries have no benefited, which is a big problem. The government needs to make a series of policies to expand the beneficiary to every enterprise and everyone in order to make the whole country be strong and rich. This way of wealth creation and sharing mechanism is policy innovation. To the middle and low income, the most important demand for the transportation is cheap besides safe, comfortable, high speed, convenient. The long-term subsidy mechanism is actually the welfare for all. On the surface, the government is spending money, but the government is actually making money, because at the same time it
apparently develops economy and increases taxes. This is a win-win situation between the government and people.

8. Establish Jointly Managed Mechanism of State Administration + Investor Enterprise Operation Management for American high-speed railways network. This is a necessary condition for success. A government department called “The national Development and Reform Commission” should be established, which is responsible for policy innovation and managing big infrastructure investments and construction, and finish this plan above in high speed, high efficiency, and high quality.

[Notes] High Speed Railways + Super Cities Network is the core project of the rapid economic growth for America and the only one way to keep America stronger in the world in the next 20-30 years. This is a huge systematic engineering. So it needs a special management mechanism.

9. The infrastructure of the high speed railway trunk lines and super cities are listed as a special policy support industry. In terms of taxation, subsidies, accounting system, investment and financing system, credit policy, land acquisition, engineering construction, procurement methods, personnel system, wages and benefits, education and training, protect intellectual property rights and housing security for low-income can break through current limitation and give these aspects special preferential policies to create the most favorable conditions for its development. To ensure the completion of the task, the legislative power of the policy innovation above-mentioned belongs to the president. The new policy was put forward by the National Development and Reform Commission jointly with the relevant departments, and the president signed into force. Take fast legislation and fast implementation in order to save time and improve efficiency.

[Notes] The legislative power belongs to the president, because the infrastructure construction innovation policies are very much. If everything voted through Congress, it will delay time, unable to keep pace with the speed of economic development, and finally resulting in huge economic losses.

The scope of legislation needs to be accurately be defined. If the scope of legislation is too large, it is difficult for the president to get the legislative power. On the other hand, if the scope of legislation is too small, it can not meet the needs of policy innovation in the implementation of the plan. These scopes of the legislation is a summary of the author's decades of experience, which not only meets the needs of the task, but also is not too broad, because the new problems in the next 8 years are basically within these scopes.

The Latest Developments

Yesterday, President Trump was giving his first State of the Union Address, when this paper was just being last edited to publish. As talking about the infrastructure construction, the president made a clear reference to the need to cooperate with private investment. This new view is just the core of this paper. According to the current situation, it is necessarily to discuss some relevant new questions as follows.

1. Amount of investment. The state of the Union had changed the previous government's investment of $1 trillion to $1.5 trillion, suggesting that the confidence of the American government is increasing and its determination is also increasing. This is more favorable condition to the plan of this paper.

2. Economic growth. At present, American economic growth is decided by the automobile wheels 70km/h; In China it is decided by the high speed railway wheels 350km/h. What speed will America need? To answer this question, we have to recollect a big debate causing a sensation in China over a decade ago, which was a spirited debate about whether adopting wheel railway or magnetic floating. There was no result at all after many years debate. Finally, money made this decision. At that time just the Asian financial crisis, China was very difficult. Because the cost of the wheel railway is 30% of the magnetic, the wheel railway had finally been chosen. Is this experience worth learning for America?

The cost of high speed railway in developed countries is far beyond China. In 2017, the UK planned to build 192 km of high speed railway, and the cost per kilometer was 20 times more than China. At this price, the cost difference between the wheel railway and the magnetic floating is
negligible. However, the magnetic floating speed will be doubled to 600KM/h or more. It takes only 6 hours to cross America from San Francisco to New York, which is a long, continuous and great driving force for economic growth.

Although the cost of construction in the developed countries is very high, the cost reduction space of it is still very large. Much of the policy innovation of this paper also involves how to reduce the cost, in order to make the investors more rewarded and let the project get more investment.

3. Prospects for development. If adopting magnetic floating, the manufacturing industry will take off. The price of one carriage is equal to one big air plane. This is a huge new market that needs to make 20 thousands km magnetic roadbed and countless carriages. This is the best investment objective of the back flow funds. According to the China experience, the social wealth of all cities along the 350km/h railway will at least be doubled; 600 km /h will be quadrupled. The new wealth will be transferred to all walks of life through various ways. The adopting of magnetic floating would make American industry technology, infrastructure and social wealth growth surpassing China again. The prospects are very optimistic.

Summary

This paper has solved two most important problems of infrastructure construction plan: the source of investment and the mode of profit. Within 8 years, the government is only needed to add $250 billion debt in the first two years and promise to pay $125 billion each year, by means of policy innovation, to drive $10 trillion private investment to construct 20 thousand km high speed railways and 8 super cities infrastructure, to lay a good foundation for the future of 20~30 years. It will deliver more than 10 million jobs, double the social wealth and creating several trillions of tax. It makes America enter a new historical period of reducing debt and the traffic revolution marked by time, speed and efficiency, and the most powerful economy strength era. There is no doubt that policy innovation will make a great contribution in the future. But however, because of all kinds of resistance from all sides, America now needs great determination and courage to start it, which is the decisive battle for America Great Again.

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