

VEPR Policy Discussion Note PD-02

Forecasts of the Vietnamese socio-macroeconomy in the period of 2016-2020

VEPR Research Department

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PD – 01

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1. ASSESSMENT ON THE DEVELOPMENT OF SOCIO-MACROECONOMY IN THE PERIOD OF 2011-2015

This section highlights the key economic indicators in the period of 2011-2015 compared to the targets set in the Resolution of the 11thNational Party Congress.

Table 1 compares the targets with the performance of each year, the average of the period of 2011-2015, or the figure at the end of the period. Figures for the years 2014 and 2015 were forecast. Figures showed that 8 out of 12 key economic indicators of the whole set of socio-economic development indicators underperformed (as highlighted). The most noticeable are the outcomes of economic growth and the growth of value-added in the industry-construction sector, which were significantly lower than planned. It resulted from the fact that (1) the global financial crisis – economic slowdown caused more severe impacts than expected, and that (2) domestic reforms did not bring viable results in the context of the increasingly inefficient economy.

Regarding the first reason, the over-optimism of the assessment and prediction of the ones who were in charge of making forecast were to blame for not taking into account the accurate impacts of the global financial crisis as well as overestimating the ability of the economy to recover. If the assessment had been more in line with reality, the targets would have been lowered. For instance, an average annual GDP growth rate of 6.5% or an average growth rate of 7% in value-added of industrial production would be more plausible.

However, even in the case of more realistic planning, the targets of the period of 2011-2015 would not be reached since the overall results were considerably lower than anticipated. This reflects the limited capability to implement reforms and improve the efficiency of the economy during the previous years, which is entirely a subjective reason.

As a consequence of the underperformance of key indicators, a number of other indicators did not turn out satisfying either.

The structure of the economy shifted more slowly than expected, with neither the proportion of industrial production in GDP nor reduction in the percentage of labor in the agriculture sector) achieving the targeted goal.

The budget deficit has not been improved and even got worse than predicted. In 2014, similar to previous years, the government continued borrowing in order to compensate for the budget deficit, leading to the rising public debt. Despite not having a direct impact on the economy at the moment, it created invisible instabilities through weaker expectation about the future, resulting in the cautiousness of the private and FDI sectors. The concerning problem regarding the government budget lies in the expansion of current spending at all levels of the bureaucracy, which originated from their inefficiency. The radical solution stands in Viet Nam's administrative reforms.

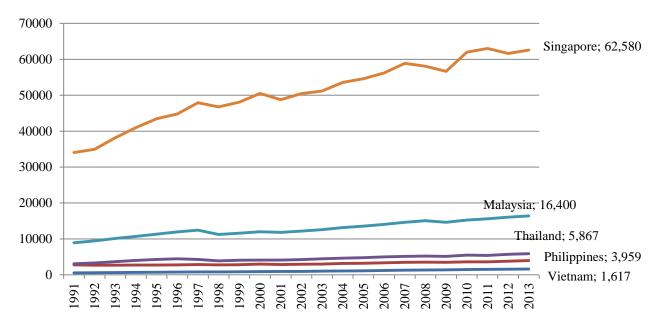
In term of trade balance, the surplus was maintained throughout the year 2014 since 2012 and 2013, yet kept its tendency to move into deficit. Because the trade surplus in recent years originated from the weakening of the domestic demand for imports, when the economy recovers the balance would shift to deficit as in previous period. However, either surplus or deficit, its extent is not enough to pose a threat in the short-term.

Regarding social indicators, the population growth and poverty reduction rates did not perform successfully either. According to United Nations' forecast on population, the population growth rate of Viet Nam until 2015 cannot decrease to the target of 1% as planned.

The GDP per capita in USD surpassed the target; however, it resulted from a change in nominal exchange rate between VND and USD. Thus, it should not be regarded as an achievement because the USD/VND exchange rate depends on the active control of the State Bank of Viet Nam. The principle of this argument leans on the fact that Viet Nam continuously maintained its surplus in balance of payments thanks to the surplus in both the capital account and current account (due to the temporary stabilization in trade balance and the continuity in annual flows of remittance). Therefore, State Bank of Viet Nam tended to exercise its control only by buying the surplus in balance of payments in order to prevent the appreciation of Viet Nam Dong.

Other well-performed indicators essentially did not reflect the improvement or change in the quality of the economy.

Another issue worth noticing was that, in general, Vietnam increasingly integrated into the world economy, shifted the economy towards market mechanisms and strived for improvement; yet the productivity of Vietnamese labor remained low in comparison with other economies in the region.





Source: ILO, Global Employment Trends 2014

Indicator	Targets	2011	2012	2013	2014f	2015f	Average or End-of-period figure
Economic growth	7.0 - 7.5%	6.2%	5.2%	5.4%	5.5%	<mark>5.6%</mark>	<mark>5.60%</mark>
Industry-construction value-added	<mark>7,8 - 8%</mark>	<mark>6.7%</mark>	5.7%	<mark>5.4%</mark>	5.6%	<mark>5.7%</mark>	<mark>5.83</mark> %
Agriculture value-added	2.6 - 3%	4.0%	2.7%	2.7%	3.5%	3.6%	3.29%
GDP structure							
Agriculture	17 - 18%	20.1%	19.7%	18.4%	17.7%	17.0%	17.0%
Industry	41 - 42%	<mark>37.9%</mark>	<mark>38.6%</mark>	<mark>38.3%</mark>	<mark>38.7%</mark>	<mark>39.0%</mark>	<mark>39.0</mark> %
Services	41 - 42%	42.0%	41.7%	43.3%	43.6%	<mark>44.0%</mark>	<mark>44.0</mark> %
Percentage of labor force in agriculture, forestry, and fishery	<mark>40-41%</mark>	<mark>48.4%</mark>	47.5%	<mark>46.9%</mark>	<mark>46.5%</mark>	<mark>46.0%</mark>	<mark>46.0</mark> 9
Growth of exports	12% on average	34.2%	18.2%	15.4%	12%	10%	17.66%
Net exports (billions of USD)	More balanced	-9.84	0.36	0.90	1	1.2	-1.2
Total investment (% of GDP)	40% on average	<mark>34.6%</mark>	<mark>33.5%</mark>	30.4%	30.70%	31.0%	<mark>32.04</mark> %
Budget deficit (% of GDP)	4.5% (2015)	4.4%	4.8%	5.2%	4.8%	4.5%	4.72%
Population growth	1% per year	1.04%	1.06%	1.05%	1.04%	1.03%	1.044%
GDP per capita	2000 USD (2015)	1,543	1,755	1,911	2,067	2,223	2,22
Poverty rate	- 2% per year	-1.60%	-1.30%	-1.20%	-1.20%	-1.20%	-1.209

Table 1. Target and performance of selected socio-economic indicators

Meanwhile, the efficiency in spending capital decreased over time. Figure 2 illustrates that ICOR (Incremental Capital Output Ratio) has been on the rise, especially since 2007.

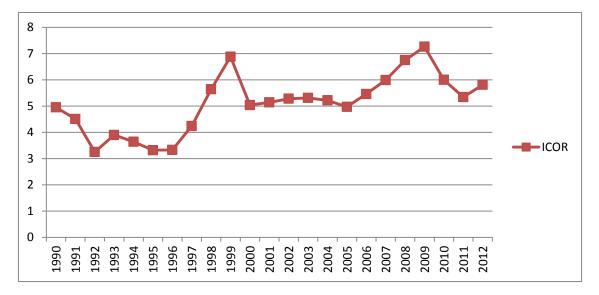


Figure 2. Vietnam ICOR, 1990-2012

Source: author's calculation from GSO data (2013)

In one word, the 5-year plan of 2011-2015 did not go in accordance to the expectation and plan of the Resolution of the Socio-economic Development approved by the 11th National Congress of the Communist Party of Vietnam. Moreover, the integration of the Vietnamese economy into the world economy raised a number of issues, of which the primary ones were the pressure for economic reforms and improvement of the efficiency and labor productivity in particular and the entire economy in general.

2. FORECASTS OF THE VIETNAMESE ECONOMIC GROWTH IN THE PERIOD OF 2016-2020.

Calculations showed that, if the economy is unable to renew its engine of growth from the improvement of total factor productivity, while the basic input factors including capital and labor are not likely to develop markedly, it is very likely that the economic growth will not deviate away from the long-term downward trend.

Although positive signals in production have emerged from the second half of 2013 to the first half of 2014 and it was expected that they would keep improving, the economic growth remained on the long-term downward trend. Until recently, the economic growth was factor-driven; thus, strong determination to reform the economy is crucial in restoring the high growth trend. Reform will create improvement in the efficiency of using capital (ICOR will be reduced as a result), skills of labors, and especially the total productivity factor by transiting to an efficiency-driven and innovation-driven growth model, which incorporates innovative technology and science into production and is open to global cooperation to diversify and improve the quality of export products and increase competitiveness in the world market.

2.1. Overview of the trend of the Vietnamese economy in the period of 2016-2020.

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2.2. Detailed results based on scenario, in case of lacking radical reform

In fact, there are a range of factors affecting the performance of the Vietnamese economy. Objectively, it includes whether the various circumstances of the international environment (the world and regional economy) facilitate the development of the Vietnamese economy (through external demand for Vietnam's exports, the world price, the potential foreign investment, and favorable conditions in trade and international connection). Subjectively, it depends on the domestic policy, the commitment to reform aiming at increasing the efficiency and quality of growth, conditions of changing economic structure, quality of input, especially the quality of labor and public investment, and policy to marshal input from outside (which will change external debts), the possibility of institutional and administrative reform, innovation in science and technology to increase productivity, etc.

Regarding international condition, we propose three scenarios:

1. Disadvantageous: This is the case when conflicts rise in the world, pushing price of raw materials. In the region, Vietnam-China relation sees more tension developing and escalating as in summer of 2014. In this scenario, Vietnam

exports grow slowly, imports will be harder due to price hikes. However, per our view, the likelihood is low.

- 2. Normal: This is the case when development of international issues in the world and the region remain stable as today. Trade will further expand, the integration of AEC (ASEAN Economic Community) is on schedule, and there is no sudden jump in world price of raw materials. Vietnam exports growth remains around the average annual rate of the period of 2012-2014.
- 3. Advantageous: This is the case when trade agreements such as TPP (Trans-Pacific Partnership) are approved and adopted. The EU-Vietnam Free Trade Agreement is effective. Vietnam exports to major markets such as the US and the EU increased markedly. Other conditions are similar to the normal scenario.

Due to the complex nature of such conditions, collecting different progressions of different variables will generate a range of forecasts. By doing so, we will have a "cloud" of different outcome and possibilities.

However, for the convenience of analysis and policy making, we will gather the data into key scenarios, each of which has a specific range of forecasts, thus, making it easier to visualize the future prospects.

Adopting that approach, in the period of 2016-2020, we gather the Vietnamese economy into three scenarios as follow

1. Low economic growth

The growth rate of inputs in this scenario (annual average for the period of 2016-2020):

TFP: 2.0% /year

Labor: 0.88% /year

Social capital investment (at current prices): 11.5% /year; real growth (constant prices, inflation adjusted): 5.5% (equivalent to ratio of investment to GDP about 30.5 to 31%, similar to today)

ICOR maintains its current high level (no improvement), about 5.6 to 5.7.

Average domestic savings rate (savings to GDP): 30.35%

FDI: grows by 0 to 5% /year

Loans to private sector: increases by 5 to 10% /year

Inflation: 6-7% /year

Average credit growth: 11.3 to 15.7% /year.

Forecast results are shown in the table below; various conditions of international environment combined with different policies of mobilizing foreign resources (a higher mobilizing rate will raise the ratio of public debt to GDP).

	Ratio of public debt to GDP as of 2020			
	60%	65%	70%	
Disadvantageous	4.20	4.22	4.24	
Normal	4.37	4.39	4.40	
Advantageous	4.56	4.57	4.59	

Table 2.GDP growth forecast, annual average of the period of 2016-2020 (%)

With this scenario, the economy will grow by 4.2-4.6% per year.

2. Moderate economic growth

The growth rate of inputs in this scenario (annual average for the period of 2016-2020):

TFP: 2.6% /year

Labor: 0.88% /year

Social capital investment (at current prices): 12% /year; real growth (constant prices, inflation adjusted): 6% (equivalent to ratio of investment to GDP about 30.5 to 31%, similar to today)

ICOR improves thanks to public investment, averaging 5.4.

Average domestic savings rate (savings to GDP): 30.35%

FDI: grows by 4 to 6% /year

Loans to private sector: increases by 8 to 15% /year

Inflation: 5% /year

Average credit growth: 13.3 to 18.7% /year.

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	Ratio of public debt to GDP as of 2020			
	60%	65%	70%	
Disadvantageous	4.66	4.69	4.70	
Normal	4.83	4.85	4.87	
Advantageous	5.02	5.04	5.05	

With this scenario, the economy will grow by 4.66-5.05% per year.

3. High economic growth

The growth rate of inputs in this scenario (annual average for the period of 2016-2020):

TFP: 3% /year

Labor: 0.88% /year

Social capital investment (at current prices): 12.5% /year; real growth (constant prices, inflation adjusted): 6.5% (equivalent to ratio of investment to GDP about 30.5 to 31%, similar to today)

ICOR improves, averaging 5.2 (equal to 2000-2005 period).

Average domestic savings rate (savings to GDP): 30.35%

FDI: grows by 7 to 10% /year

Loans to private sector: increases by 10-15% /year

Inflation: 6% /year

Average credit growth: 16.3 to 21.7% /year.

It should be noted that in this scenario, the assumption of TFP growth of 3% annually during the period of 2016-2020 is remarkably high. To reach this level, the economy must have reform and change dramatically.

	Ratio of public debt to GDP as of 2020			
	60%	65%	70%	
Disadvantageous	5.36	5.38	5.40	
Normal	5.53	5.55	5.56	
Advantageous	5.71	5.73	5.74	

Table 4. GDP growth forecast, annual average of the period of 2016-2020 (%)

With this scenario, the economy will grow by 5.36-5.74% per year.

2.3. Promoting bold reform and its effect

Economic reform requires many changes and innovations, high political determination and a new development strategy. However, for the purpose of modeling, it is plausible to rearrange reform measures into selected key aspects as follow:

Reform to improve Total Productivity Factor

The assumption is that the rise in productivity is around 0.5% or 0.3% higher than baseline, which means an annual rise of around 2.5%, 2.9% and 3% for each different scenario respectively.

This increase is slightly higher than the estimated TFP growth in the period of 2002-2007. The stronger rise in productivity translates to an additional 0.5 percentage points of GDP growth compared to the baseline, and in 2020, GDP growth will increase by 2.67 percentage points compared to the baseline. Meanwhile, the productivity growth from 2.7%/year to 3%/year improves the GDP growth to approximately 0.3 percentage points annually.

Baseline scenario	TFP in the baseline scenario	TFP post-reform	Extra GDP growth
Low growth rate	2%	2.5%	+0.5%
Moderate growth rate	2.4%	2.9%	+0.5%
High growth rate	2.7%	3%	+ 0.3% (unable to reform further)

Specifically, the impacts of reform in 3 scenarios may raise TFP as follows:

Reform to improve human resource

The assumption is that low-skilled labor (those who attain primary and secondary school diplomas) is declining by 2% per year compared to the baseline scenario, and skilled labor (those who have a high school or higher diploma) is rising proportionately.

The results showed that, even when total capital and labor remains unchanged, a rise in the number of skilled labors may contribute 0.1 percentage points to the GDP growth. Promoting skilled labor affected to capital-intensive manufacturing industries the most, in areas such as chemicals, transportation means, metallurgy, or machinery production.

Stimulating economic integration and promoting exports

The assumption is that the external environment is more beneficial to the Vietnamese economy (the higher world economic growth, the less trade barriers, etc.) In this simulation, the export demand parameter is assumed to grow by 5% per year, higher than 3% in the baseline scenario. This simulation was computed with the assumption of the second labor market closure condition (fixed wage rates, flexible labor).

The results showed that faster expansion of export market raises the GDP growth by 0.6 percentage points annually compared to the baseline scenario, and increases export growth by 0.9 percentage points. The broadening of the exports market (which was

assumed equally to all sectors) also brings benefits to manufacturing industries, with the rise of the proportion of industrial production.

It can be seen from these simulation results that if the domestic business environment, institutions and administrations have drastic reforms in line with an improved human resource and the expanded markets abroad for Vietnamese exports, the GDP growth can increase by 1.0-1.2%/year.

The baseline scenario	Content of reform	Impacts on GDP gr (annual averag		
		Low	Moderate	High
Reform of business environment, institution and administration to raise TFP	TFP growth annually rise by 0.5 percentage points compared to the baseline scenario	0.5%	0.5%	0.3%
Improve trained human resource by upgrading unskilled labors to skilled labors.	low-skilled labors decline by 2% per year and skilled labors increase proportionately		0.1%	
Improve exports and approach markts	Exports markets widen (by 5% per year)		0.6%	
Broad reform	All of the above	1.2%	1.2%	1.0%

Table 5. A summary of reform scenarios and impacts on economic growth

The result of GDP growth forecast is an annual average in the period of 2016-2020 in different scenarios:

Table 6. GDP growth forecast, annual average 2016-2020 (%)

[Broad reform in the foundation of the low growth scenario, boosting GDP growth by 1.4%]

	Ratio of public debt to GDP as of 2020			
	60%	65%	70%	
Low growth rate	5.40	5.43	5.44	
Moderate growth rate	5.57	5.60	5.62	
High growth rate	5.78	5.80	5.82	

Table 7. GDP growth forecast, annual average 2016-2020 (%)

	Ratio of public debt to GDP as of 2020			
	60%	65%	70%	
Low growth rate	5.86	5.89	5.91	
Moderate growth rate	6.04	6.07	6.08	
High growth rate	6.24	6.26	6.28	

[Broad reform in the foundation of the low growth scenario, boosting GDP growth by 1.3%]

Table 8. GDP growth forecast, annual average 2016-2020 (%)

[Broad reform in the foundation of the low growth scenario, boosting GDP growth by 0.9%]

	Ratio of public debt to GDP as of 2020			
	60%	65%	70%	
Low growth rate	6.06	6.09	6.11	
Moderate growth rate	6.28	6.31	6.32	
High growth rate	6.47	6.50	6.52	

In conclusion, in the period of 2016-2020, with various international conditions and different levels of commitment, the annual economic growth is forecasted as follows:

Table 9. Economic growth by international condition and determination to reform,
annual average of the period of 2016-2020

International condition/ determination to reform	Without reform	Bold and broad reform
Disadvantageous	4.20-5.40 %	5.60-6.30 %
Normal	4.37-5.56 %	5.77-6.46 %
Advantageous	4.56-5.74 %	5.96-6.64 %

Growth condition of the inputs in this scenario (annual average in the period of 2016-2020):

- For scenario without bold and active reform, the economy will probably be on the track of scenarios that were described above (4.2 to 5.7%).

- For scenarios with bold and comprehensive reform: adding 0.5 percentage points to TFP growth while keeping aggregate growth under 3%, unskilled labor in the labor force increases by 2% per year (structural shift in the labor force sees improvement of

workmanship and skills through education, training, applying scientific and technological innovation, etc.), and exports price increased by 5% per year compared to the current.

Essentially, the reform scenario is simply a transition to efficiency-driven growth model aiming at a more rapid and sustainable development.

In terms of implementation, it is necessary that growth is factor-driven and efficiencydriven, of which the latter is the main driver. Economic growth will be produced on the basis of the modern institution of market economy and international integration.

To boost productivity and quality of input factors, it is necessary to raise labor productivity. Investment should be spent on improving factors of efficiency-driven growth: human resource, infrastructure, knowledge economy, science and technology, research and development, technology transfer.

The role of science and technology in economic growth must be considered to be the key to reduce input (capital, land, energy, labor, etc.) while maintaining growth rate and aiming for higher growth. This is the fundamental solution to boost TFP growth as suggested in the reform scenarios.

While improving the quality of growth, factor-driven growth should be utilized with high effectiveness, which will reflect to ICOR.

In reality, if Vietnam succeeds in creating international competitive advantages based on developing leading industries and dynamic economic regions, these advantages will also help sustainably improve the rate and quality of economic growth.

CONCLUDING REMARKS

The forecasts show that in the period of 2016- 2020, the average annual economic growth of Vietnam is unlikely to exceed 6% due to the lack of improvement in the dynamics and quality of growth.

The growth rate of investment may exceed 6% (at constant prices). Credit growth may be around 12-21% per year, depending on the perspective of the monetary policy (inflation targeting) and macroeconomic conditions. The annual rise of 12 to 21% is sufficient to maintain inflation within the target of 6%, regardless of different macroeconomic conditions.

It should be noted that in case where the credit grows by 20% and higher, the risk of inflation of over 10% is high, the economy will expose to the risk of disturbing macroeconomic balances.

Maintaining high growth rates depends on foreign borrowing, so the efforts to raise economic growth (above 6-6.5%) may associate with rapid increase of foreign debt.

Small business environment improved modestly, with AEC coming into effect since 2015 may reduce FDI into Vietnam. However, the value of the Chinese Yuan (Renminbi), the cumulative risks from the Chinese market and the ability to establish TPP are the motivations which increase foreign investment opportunities in Vietnam.

To improve the speed and quality of economic growth, it is crucial to have strong commitment to make bold reforms in order to increase the productivity of the entire economy and redirect resources towards higher quality. Economic institutional and administrative reforms will play a decisive role besides the improvement of human resources and expansion of the export markets with the modern international connection model. Only with bold reform efforts with high commitment, Vietnam can grow over 6% under favorable international conditions. Targeting an annual average growth of 7% in the period 2016-2020 is infeasible. In other words, the period of high growth rate in the 1990s and early 2000s (averaging 7.5% /year) is not likely to repeat in the future.

Disclosure appendix

Analyst Certification

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Additional disclosures

1. This report is dated as at January 15, 2015.

2. All data included in this report are dated as at close December 27, 2014 unless otherwise indicated in the report.

3. VEPR has procedures in place to identify and manage any potential conflicts of interest that arise in connection with its Research Department. Any confidential and/or sensitive information is handled in an appropriate manner.



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