# MINISTRY OF PLANNING AND INVESTMENT SOME CHARACTERISTICS OF VIETNAM'S INDUSTRIAL STRUCTURE (Sub-component of the Project 'Restructuring the economy') (First Draft) Dr. Nguyen Dinh Cung Mr. Pham Hoang Ha Hanoi, May 2010

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#### Introduction

The Vietnam economy has achieved steady growth since its implementation of Domoi. It has also experienced early stage of industrialisation process with increasing importance of manufacturing activities in the economy. However, the recent slowdown in economic growth and the prolonged weak competitiveness of the economy indicates the weakness of industrial structure. Among others, the major weaknesses are slow shift toward the industrial structure of industrialised economy, low capital efficiency, labour productivity and value added, new employments created by the manufacturing activities being not adequately offset those leased from agriculture sector, heavily dependence on internal markets for outputs and major inputs. These weaknesses become more serious in the context of recent global economic crisis as reflected in significant drop in economic growth, exports and employment. These developments require the economic restructure, especially the industrial structure.

The objective of this study is to provide the direct inputs for the Report on Restructure of Vietnam Economy by extensive studies on the Vietnam industrial structure over past ten years to find the chacracteristics and trends in the Vietnam industrial structure. Studies on industrial structure are not new. In fact, there are many studies in this area in Vietnam as well as in the world. The methodology for industrial analysis is also standard. This study has some value added as followings:

- Conducting comprehensive analysis of Vietnam economic structure over past ten years;
- Using the most updated data to calculate structures of aggregate supply, aggregate demand, inter-industrial linkages, multiplier effects.
- Calculating the cost structure of the economy.
- Providing some qualitative assessments about the economic structure on the basis of the quantitative analysis.

This study is structured into seven section. Section 1 on sources and shifts in GDP; Section 2 on sources and shifts in employment; Section 3 on structure of goods and services supply; Section 4 on structure of aggregate demand for goods and services; Section 5 on cost structure of Vietnam's economy; Section 6 on impacts of changes in final demands for industries on the economy; and Section 7 on the conclusions and recommendations for industrial restructure policies.

#### 1. Sources and shifts in Vietnam GDP

Vietnam's GDP growth rate is maintained at relatively high but below those of counties in early industrialization process and its potential. On average, Vietnam's GDP grew at annual rate of 8.2 percent during the plan period of 1991-1995, 7 percent during the 1996-2000 period, 7.5 percent for the 2001-2005 period and around 7 percent for the 2006-2009 period. The growth rate achieved in the 1996-2000 period was far below the targeted one of 9-10 percent due to the 1997 Asian financial crisis; again, for the current planning period of 2006-2010, the averaged annual growth rate is high possibly less then the planned one of 7.5-8 percent under the adverse impact of recent global economic slowdown.

GDP growth tends to reply less on the agriculture sector and more on the service sector. The agricultural, forestry and fishery sector contributed 8.8 percent of GDP growth rate for the 2006-2009 period, much lower the contribution shares of 11 percent during the plan period of 2001-2005 and 15.9 percent of the 1996-2000 period (see Table 1). The reduction is mainly due to steady decline in the contribution of the agriculture sector in the overall GDP growth and in recent years only at 6 percent; meanwhile, the GDP growth contributions by forestry and fishery sectors are almost unchanged.

The contribution to GDP growth by industries of the industrial sector show various tendencies. The role of mining industries has declined overtime; for years from 2006-09, these industries have even experienced negative growth rates. The manufacturing industries still have largest contribution to the GDP growth. These industries account for 32 percent of GDP growth, significantly higher than there share of 28.7 percent for the plan period of 1996-2000. The electricity, gas and water production and distribution industries maintained the contribution share of 3-4 percent of GDP growth. The construction industry is generally accounts for significant portion of GDP growth, about 10.7 percent for the 2006-09 period, slightly reduced from 11.5 percent for the 2001-05 period, but still largely higher than 7.8 percent of the 2001-05 period. In combination, the above different contribution tendencies result the GDP growth contribution of combined industries and construction declined to 46.5 percent during the 2006-09 period, somewhat lower than the share of 50% for the previous periods.

For the services sector, the major service activities' contributions to GDP growth indicate the increasing tendencies. Trade activities have made largest contribution, about 18.4 percent of GDP growth for the 2006-09 period. The other services having the important contribution to GDP growth are telecommunication, around 6.3 percent, restaurant 4.5 percent, education and

training 3.8 percent. The banking and financial services maintain the contribution of more than 2.4 percent to GDP growth. Overall, the services sector made 44.7 percent of GDP growth for the years 2006-09, significantly increasing from 37.9 percent and 35 percent during the previous plan periods.

**Table 1. Contribution by economic sectors and industries into the GDP growth rates**(in percentage of overall GDP growth)

	1996-2000	2001-2005	2006-2009
Agriculture, Forestry and Fishery	15.9	11.0	8.8
Agriculture	13.9	8.0	6.0
Forestry	0.2	0.1	0.2
Fishery	1.8	2.9	2.6
Industry and construction	49.1	51.1	46.5
Mining industries	10.4	3.7	-0.1
Manufacturing industries	27.2	31.7	31.9
Electricity, gas, and water production and distribution	3.8	4.1	4.1
Construction	7.8	11.5	10.7
Services	35.0	37.9	44.7
Trade	14.1	16.2	18.4
Hotels and restaurants	2.7	3.9	4.5
Transport, storage and communications	3.7	3.8	6.3
Financial intermediation	2.2	2.1	2.4
Scientific activities and technology	0.5	0.7	0.6
Real estate, business activities	3.2	2.2	1.5
Public administration	1.2	2.1	2.8
Education and training	2.8	3.3	3.8
Health and social work	1.2	1.4	1.6
Recreational, cultural and sporting activities	0.6	0.5	0.6
Activities of party and organizations	0.2	0.1	0.1
Community, social, personal services	2.3	1.6	1.9
Private households with employed persons	0.2	0.1	0.2

Sources: Our calculations based on the GSO data

GDP growth heavily depended on capital factor. For the 2000-2005 period, the capital factor contributes around 65 percent of GDP growth, while labour factor for 19 percent of GDP growth and total factor productivity for remaining of 16.1 percent. The ICOR suggests that for the 2000-2007 period, one unit of GDP increase requires for father 5.2 capital units. This level is high as compared with the countries with same level of development.

The non-state sector consolidates the largest GDP growth sources. In recent years, the GDP growth contribution of the nonstate sector has reached to 52.2 percent, remarkably increasing from 44.6 percent and 36.5 percent of the recent five-year plan periods (see Table 2). The increasing importance of the nonstate sector has came from both private and individual subsectors, while the contribution by the collective subsector declined overtime. Obviously, the individual subsector made largest contribution to the GDP growth in the recent years. Recently, the foreign invested sector has restored its role to the GDP growth with its share in the overall GDP growth of 19.5 percent. The state sector has largely declined the role as the GDP growth source. In recent years, the state sector has accounted for 28.4 percent of overall GDP growth, being only half of the nonstate contribution and significantly lower than its contribution during the previous plan periods.

Table 2. Contribution by economic ownership sectors into the overall GDP growth rates

(in percentage of overall GDP growth)

	1996-2000	2001-05	2006-2008
State sector	42.5	40.5	28.4
Nonstate sector	36.5	44.6	52.2
Collective	5.6	4.1	3.0
Private	8.1	14.3	18.7
Individual	22.8	26.2	30.5
Foreign invested sector	21.1	15.0	19.5

Sources: Our calculations based on the GSO data

Export consolidates its role as the aggregate demand components having strongest influence on GDP growth. Generally, export is the aggregate demand component have largest and increasing influence on GDP growth, from 8.5 percentage point in 2001 to 19.8 percentage points in 2007 (see Table 3). The final consumption, largely private consumption, is the second strongest and increasing impact on the GDP growth, from 3.4 percentage points in 2001 to 6.6

percentage points in 2008. With exception of year 2008, the investment demand has stable contribution of 3 – 4 percentage points of GDP growth, mainly the fixed investment. There is a raising portion of aggregate demand is toward the imported goods and services. From the aggregate demand point of view, the demand for imported goods and services reduced the GDP growth by 9.1 percentage points in 2001 and then to 19.4 percentage points in 2006 and extremely high of 31.2 percentage points in 2007, before reducing significantly to 4 percentage points in 2008. The structure of goods importation indicates that there is a significant portion of investment demand are supplied by the imported goods and services. Therefore, the development of the competitive industries that produce machineries, equipments, productive materials have strong impact on GDP growth.

**Table 3. Contribution by aggregate demand components into the GDP growth rates**(in percantage point of GDP growth)

	2001	2002	2003	2004	2005	2006	2007	2008
	. 0			- 0	0.4	0.0	0.=	-
GDP growth rate	6.9	<b>7.1</b>	7.3	<b>7.8</b>	8.4	8.2	8.5	6.2
Consumption	3.4	5.3	5.7	5.2	5.3	6.0	<b>7.6</b>	6.6
Private consumption	3.0	5.0	5.2	4.7	4.8	5.4	7.0	6.1
Government consumption	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.5
Investment	3.3	4.0	3.9	3.7	4.0	4.3	10.1	2.8
Fixed investment	3.1	3.8	3.7	3.4	3.3	3.4	8.3	1.5
Inventories	0.2	0.2	0.2	0.2	0.7	1.0	1.8	1.3
Export, net	-0.6	-3.3	-3.2	0.4	2.2	-2.1	-11.4	-4.9
Export	8.5	6.2	11.7	16.8	15.6	17.3	19.8	-0.9
Import	-9.1	-9.6	-14.9	-16.4	-13.5	-19.4	-31.2	-4.0

Sources: Our calculations based on the GSO data

GDP structure changes positively but slowly with increasing share of manufacturing industries. The shares of agriculture, forestry and fishery activities in the overall GDP follow the decreasing tendency, from 27.2 percent in 1995 to 24.5 percent in 2000 and 21 percent in 2005. In recent years, the GDP shares of these activities have declined slowly and accounted for 20.7 percent of GDP in 2009. The international experiences show that the GDP share of these activities fell significantly during the industrialization process and the stable at the low level, around 2-3 percent for Japan and Korea and 6 percent for other countries. Obviously, Vietnam's

GDP remain heavily depending on the agriculture, forestry and fishery activities. Furthermore, the reduction in the GDP share of these activities has been slow in the recent years.

The GDP shares of industry and construction sector has steadily increased overtime, from 28.8 percent in 1995 to 36.7 percent in 2000 and 41.7 percent in 2005. Recently, the GDP shares has been stagnant at 41.7 percent in 2007 and 40.2 percent in 2009. The industrialization experiences indicate that the GDP share of industrial activities increased rapidly and reached to the maximum share of 48-50% GDP and then declined during the post industrialization. In the region, Japan and Korea have been in the declined GDP shares of industry and construction sector; particularly, the GDP share of these activities was at 28 percent for Japan and 33 percent for Korea. The countries at lower development level have been in the stage of increased GDP share of industrial activities, which are very closed to the level of early industrialized countries. Particularly, in 2008 the GDP share of construction and industry sector was 45 percent in Thailand and 48 percent in Malaysia, Indonesia and China. Compared with other countries in the region, Vietnam's GDP share of industry and construction sector follow the common tendency of the industrialization process and are far from the maximum share of these activities in GDP. Taking account of recent speed of GDP share of these activities in Vietnam, it could possibly take a long time to reach the maximum level.

After significant reduction in GDP contribution from 38.1 percent in 1995 to 38.7 percent in 2000, the services sector basically maintains the GDP share around 38-39 percent over the past ten years. The experiences from the industrialized countries show that the GDP share of services sector are stable or slightly declined during the industrialization process because of rapid expansion of industry and construction shares in GDP. However, during the post industrialization as GDP share of agriculture at stable low level and GDP share of industry and construction at rapidly reduced level, the services sector become the major sources of growth and its GDP share start increasing. In the region. GDP share of services sector has increased rapidly from 53 percent in 1995 to 72 percent in 2008; Korea also experienced strong transition toward the services with GDP share of 54 percent in 2008. In short, the changes in the Vietnam's GDP share of services sector reflect the role of this sector during the industrialization process.

Table 4. GDP structure by economic sectors and industries

(In percentage of GDP)

	1995	2000	2005	2006	2007	2008	2009
Agriculture, Forestry and Fishery	27.2	24.5	21.0	20.4	20.3	22.1	20.7

Agriculture	24.3	21.2	17.0	16.5	16.3	17.4	16.1
Forestry	0.0	0.0	0.0	0.0	0.0	0.7	0.8
Fishery	2.9	3.4	3.9	3.9	4.0	4.0	3.8
Industry and Construction	28.8	36.7	41.0	41.5	41.5	39.7	40.2
Mining	4.8	9.6	10.6	10.2	9.8	8.9	9.0
Manufacturing	15.0	18.6	20.6	21.2	21.3	21.1	20.9
Electricity, gas and water supply	2.1	3.2	3.4	3.4	3.5	3.2	3.6
Construction	6.9	5.4	6.3	6.6	7.0	6.5	6.7
Services	44.1	38.7	38.0	38.1	38.2	38.2	39.1
Trade	16.4	14.2	13.6	13.6	13.7	13.9	14.3
Hotels and restaurants	3.8	3.2	3.5	3.7	3.9	4.4	4.5
Transport, storage and communications	4.0	3.9	4.4	4.5	4.5	4.5	4.4
Financial intermediation	2.0	1.8	1.8	1.8	1.8	1.8	1.9
Scientific activities and technology	0.6	0.5	0.6	0.6	0.6	0.6	0.6
Real estate, business activities	5.4	4.3	4.0	3.8	3.8	3.6	3.7
Public administration	3.6	2.7	2.7	2.7	2.7	2.8	2.9
Education and training	3.6	3.4	3.2	3.2	3.0	2.6	2.7
Health and social work	1.6	1.4	1.5	1.4	1.4	1.3	1.3
Recreational, cultural and sporting activities	0.6	0.6	0.5	0.5	0.5	0.4	0.4
Activities of party and organizations	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Community, social, personal services	2.2	2.2	1.9	1.9	1.9	1.9	2.1
Private households with employed persons	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Sources: Our calculations based on the GSO data

The GDP ownership structure still follow the decreasing tendency of GDP share of domestic economic sectors, including both state and nonstate sectors, and the increasing trend of the foreign invested sector. The GDP share of the state sector declined from 40.2 percent in 1995 to 38.5 percent in 2000, and around 38-39 percent during 2001-05 and further reduction in recent years and at 34.4 percent in 2008 (see Table 5). The GDP share of nonstate sector also reclined from 53.2 percent in 1995 to 48.2 percent in 2000 and around 45-46 percent in recent years. The foreign invested sector maintains the increasing contribution to GDP. In 2008, the GDP contribution of this FDI sector was 18.7 percent, increasing steadily from 6.3 percent in 1995, 13.3 percent in 2000 and 16 percent in 2005.

Table 5. GDP structure by economic ownership sectors

(*In percentage of GDP*)

	1995	2000	2005	2006	2007	2008
State sector	40.2	38.5	38.4	37.4	35.9	34.4
Nonstate sector	53.5	48.2	45.6	45.6	46.1	47.0
Collective	10.1	8.6	6.8	6.5	6.2	6.0
Private	7.4	7.3	8.9	9.4	10.2	10.8
Households	36.0	32.3	29.9	29.7	29.7	30.1
Foreign invested sector	6.3	13.3	16.0	17.0	18.0	18.7

Source: General Statistics Office

## 2. Sources and shifts in Vietnam employment

Although Vietnam's unemployment rate is low but its job creation pressure is very high. Vietnam's unemployment rate during the 2000-08 has been kept at stable and low level of 2-2.4 percent; however, the underemployment rate is very high, around 5.1 percent in 2008. Underemployment together with high population growth and large new labour participation have created the increasing pressure on job creation. Annually, Vietnam determines the target of 1.7 million job creation; however, in fact, there are only 0.8 to 1.1 million jobs created and the number of new jobs declined. Therefore, the pressure on job creation is very high and in turn make the difficult choices between inflation and growth targets, including job creation (see Table 6).

**Table 6. Changes in employment in economic industries** 

(In '000 persons) 2001 2002 2003 2004 2005 2006 2007 2008 Agriculture, Forestry and Fishery -11 -14 -12 -148 -288 -177 -13 -183 Agriculture and Forestry -105 -213 -57 -91 -226 -361 -262 -227 Fishery 94 199 44 78 78 73 79 50 **Industry and Construction** 626 530 586 546 524 596 490 530 12 28 17 29 28 34 Mining 16 13

Manufacturing	337	273	400	272	417	407	308	343
Electricity, gas and water supply	21	11	11	11	14	22	24	28
Construction	251	235	162	235	76	138	131	126
Services	339	429	493	479	<i>565</i>	<i>504</i>	528	389
Trade	166	218	251	235	166	181	178	80
Public administration	20	42	45	52	113	69	76	74
Education and training	42	53	55	39	50	67	57	45
Private households	32	25	28	39	123	75	83	83

Sources: Our calculations based on the GSO data

The agriculture, forestry and fishery remains the main employment sources, accounting for 52.6 percent of total employment of the whole economy in 2008, followed by the service sector with employment share of 26.5 percent and industry and construction of 20.9 percent. However, the number of employment in the agriculture and forestry sector fell overtime. In recent years, agriculture and forestry employment declined significantly by 0.23 - 0.36 million persons every year. Meanwhile, the industry-construction and services sectors continuously provided more jobs every year and their contributions to job creation are equal. Since 2001, the industries playing the most important role in job creation is the manufacturing industries, accounting for 31.3 percent of new employments for the whole 2001-08 period, followed by trade 16.6 percent, construction 15.3 percent, fishery 7.8 percent, state administration, education, and private households 4.6 - 5.5 percent. As the manufacturing, trade and construction industries are the ones making largest contribution to GDP growth, it implies that the policies ensuring development of manufacturing, construction and trade have strong impacts on GDP growth and employment in Vietnam.

The employment structure by economic ownership sectors experienced almost no change in the recent years. In 2008, the nonstate sector created 87.2 percent of total employment, meanwhile, the state sector accounted for 9.1 percent and the foreign invested sector for 3.7 percent. Noticeably, the new jobs provided by the state sector is marginal and even declined. For the 2001-2008 period, the nonstate sector contributed 74.4 percent of new jobs, while the state sector only contributed 7.8 percent (see Table 7). The foreign invested sector even account for small portion of total employment of the country buy provided significant share of 17.8 percent of new jobs. These figures suggest that the policies promoting the expansion of nonstate and

foreign invested sectors would have the most effective and direct impact on job creation in Vietnam.

Table 7. Employment contributions by economic ownership sectors

(In percentage)

		\ <u>I</u>	0	/				
	2001	2002	2003	2004	2005	2006	2007	2008
State sector	10.8	15.5	26.7	7.2	-7.4	-11.1	4.4	11.9
Nonstate sector	81.4	69.4	55.9	75.3	88.2	86.4	68.3	72.9
FDI sector	7.8	15.0	17.4	17.5	19.2	24.7	27.3	15.2

Sources: Our calculations based on the GSO data

The labour structure has positive changes in closed with economic restructuring process. The employment share of industry and construction sector in total employment increased from 12.1 percent in 2000 to 17.9 percent in 2005; the employment in the services sector from 19.7 percent to 25.3 percent and in agriculture, forestry and fishery sector declined from 68.2 percent to 56.8 percent. The trained labours increased from 20 percent in 2005 to 25 percent in 2005.

# 3. The structure of goods and services supply

Vietnam's goods and services supply has increasingly replied on the import source. The ratio of imported goods and services in total supply of goods and services increased from 21.1 percent in 2000 to 27 percent in 2007. The Import/GDP ratio also risen strongly from 57.5 percent to 97.4 percent and reached to the highest level in the region, only below Hong Kong (see Table 8). This supply structure implies that the fluctuations in import prices and exchange rate will impact on important and increasing portion of aggregate supply of goods and services in the economy. Furthermore, given the high import ratio, Vietnam's economy is very vulnerable to the adverse changes in the prices of imported goods and services.

Table 8. Import over GDP ratio

(In percentage)

	1990	1995	2000	2005	2006	2007	2008
Vietnam	45.3	41.9	<b>57.5</b>	73.5	78.2	92.7	94.7
Japan	9.5	7.8	9.5	12.9	14.9	15.9	17.3
Korea	29.0	29.9	35.7	36.6	38.3	40.4	54.1

Hongkong	122.0	147.6	138.8	186.3	194.1	197.1	201.6
Taiwan	40.8	45.6	51.6	60.0	64.0	66.0	69.4
Malaysia	72.4	98.0	100.6	94.6	93.9	90.2	80.5
Thailand	41.7	48.6	58.1	74.7	70.2	65.3	73.7
Indonesia	23.7	27.6	30.5	29.9	25.6	25.4	28.6
The Philippine	33.3	44.2	53.5	51.7	48.0	42.3	38.7
China	15.6	18.6	20.9	31.4			

Sources: Calculations based on the Asia Development Bank data

The supply sources for important productive inputs of Vietnam's economy are from importation. The goods and services with the supplies mainly from importation accounting for 21 percent of total supplies of goods and services in the economy. The goods having the extremely high import ratio are gasoline (98 percent of total gasoline supplies), machineries (85 percent), chemicals (75 percent), fertilizers (79 percent), plastics, leather, garments, health equipments (80 percent). The critical production inputs in wide range of economic activities or in the critical industries largely imported suggest that the fluctuations in import prices and exchange rate would directly impact on many industries.

Table 9. Import/Supply ratio by industries

(*In percentage*)

	(111)	rerectii	uge						
	1999	2000	2001	2002	2003	2004	2005	2006	2007
Gasoline, lubricants	95.2	97.5	96.8	96.7	96.9	97.5	97.6	97.9	98.2
Basic organic chemicals	86.1	89.9	85.3	87.5	88.6	90.4	89.4	91.3	92.4
Precise and optics equipment, meter	90.3	90.3	90.5	92.2	91.5	91.9	90.5	91.6	91.8
Inl, varnish and painting materials	80.0	79.6	80.2	78.2	81.5	78.8	82.8	86.7	87.0
General -purpose machinery	72.6	76.3	80.2	84.2	85.4	86.0	81.9	84.6	85.6
Fertilizer	82.7	80.2	72.3	74.2	75.5	76.2	77.6	81.5	82.7
Plastic	82.1	83.5	81.5	80.3	81.8	84.8	75.8	78.7	80.3
Ferrous metals and products	46.6	45.9	51.3	56.9	67.4	90.5	75.6	77.9	80.1
Basic inorganic chemicals	73.9	75.3	70.0	71.1	72.0	72.7	74.0	74.7	78.5

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<sup>&</sup>lt;sup>1</sup> For this paper, the groups of goods and services are defined as import dominated supply goods are ones having the ratio of import over supply greater than 50 percent.

Products of leather tanneries	55.9	59.5	55.4	63.3	67.2	70.6	69.3	73.0	75.5
Weaving of cloths	53.2	54.8	50.3	60.8	61.5	62.4	64.6	67.4	69.3
Health instrument and apparatus	53.1	56.4	55.5	58.2	58.1	58.7	61.0	65.2	68.0
Non-ferrous metals and products	45.1	46.7	52.3	58.6	63.4	46.3	61.5	64.4	67.7
Machinery used for broadcasting, television									
and information activities	63.2	67.3	61.6	57.5	60.7	62.6	61.3	64.8	67.0
Processed vegetable, animals oils, fats	56.5	53.3	53.3	61.8	69.2	71.9	62.9	64.0	66.2
Automobiles	30.1	41.9	50.5	56.3	60.2	57.6	56.8	62.3	65.3
Fibers, thread	61.4	60.2	59.7	58.8	57.3	57.1	57.4	60.5	63.3
Health medicine	65.4	59.8	59.4	58.3	58.9	57.3	53.7	57.5	59.6
Chemical fertilizer	55.7	53.9	47.5	45.6	49.8	53.7	52.3	55.8	58.5
Tourism	40.2	30.4	27.1	46.1	43.7	45.1	52.0	51.1	51.8
Paint	39.3	38.5	39.5	42.8	42.5	44.0	45.0	47.9	50.6
Carpets	31.8	30.0	46.0	50.1	50.0	44.6	43.6	47.1	48.8
Banking, credit, treasury	50.8	44.1	43.1	42.2	42.3	40.2	38.5	43.5	46.7
Paper pulpand paper products	34.8	32.7	37.6	36.3	38.9	39.3	40.2	41.8	45.8
Sand, Gravel	46.3	46.6	45.9	37.4	40.6	27.1	36.6	40.9	45.4
Railway transport services	38.3	39.6	38.6	36.3	30.8	32.1	44.3	43.7	44.9
Culture and sport	28.5	24.9	23.7	28.5	30.1	32.4	35.8	38.8	44.0
Pesticides	38.5	48.2	49.4	44.0	39.6	39.9	41.4	41.3	43.8
Weaving, embroidery of textile-based goods	23.3	20.9	23.4	29.3	33.0	34.1	36.7	39.2	42.2
Insurance	32.0	34.7	31.4	40.1	35.9	38.4	35.8	39.6	39.0
Home appliances and its spare parts	39.0	21.1	32.8	34.9	32.4	31.3	32.3	35.5	38.9
Milk, butter and other dairy products	24.3	28.0	38.5	23.7	26.1	26.6	28.5	33.1	36.4
Electrical machinery	74.7	59.0	63.1	63.4	65.7	71.7	30.9	35.1	34.6
Processed rubber and by products	31.2	25.6	26.3	27.9	30.1	30.1	27.5	34.5	34.5
Glass and glass products	37.3	25.4	30.3	28.9	26.3	29.6	26.7	31.4	33.2
Bicycles and spare parts	40.4	35.4	34.0	32.4	35.6	35.8	25.8	30.1	32.8
Processed wood and wood products	10.1	8.3	10.2	16.1	19.0	23.9	21.7	26.5	28.1
Raw rubber	1.0	10.3	1.4	10.4	15.2	19.8	23.3	24.7	27.5
Forestry	9.9	11.3	8.8	14.6	15.9	16.9	19.8	21.8	26.5
Motor vehicles, motor biles and spare parts	31.7	46.3	37.6	24.4	18.2	11.4	18.0	23.7	26.0
Air transport services	39.2	30.7	29.5	31.9	28.4	25.0	21.3	23.8	25.9
Animal feeds	13.9	2.6	12.1	12.9	19.1	17.2	21.5	23.5	25.6
Water transport services	33.4	23.2	22.8	27.5	26.7	23.0	20.3	22.3	25.1
Alcohol, beer and liquors	18.0	12.9	11.1	18.2	17.4	14.6	19.3	21.9	23.7

Education and training	19.3	17.6	16.7	18.8	16.8	17.4	16.7	19.8	22.5
Ceramis and by products	10.3	6.1	10.2	13.3	15.8	13.6	16.5	16.7	20.3
Processed, preserved fuits and vegetables	6.7	4.5	9.2	9.8	13.5	7.3	15.3	17.9	19.9
Metallic ore	2.9	7.1	4.3	18.5	16.1	35.7	11.7	14.1	17.4
Road Transportation	15.8	17.7	17.3	21.5	20.2	16.5	14.5	15.5	16.5
Hotels	18.1	17.1	16.8	23.2	23.3	21.0	15.8	16.2	16.4
Perfumes and other toilet preparation	10.8	9.2	9.7	10.4	13.0	14.3	14.2	15.0	15.3
Products of publising house	8.7	4.6	6.3	8.2	11.2	15.6	12.3	13.8	14.9
Cakes, jams, candy, coca, chocolate	6.3	5.7	5.5	6.9	8.8	10.0	10.1	12.1	13.7
Processed, preserved meat	6.5	8.6	6.7	9.4	9.5	10.0	11.1	11.1	13.4
Concrete, mortar, other cement products	5.0	21.7	3.7	6.4	8.6	6.4	8.8	11.1	12.7
Trade	26.5	26.7	26.9	21.0	19.2	18.6	13.6	10.5	11.5
Health care, social relief	4.5	3.9	3.8	8.0	7.6	9.6	8.5	9.2	11.0
Leather goods	17.5	8.2	11.3	8.9	7.5	6.6	8.4	10.0	10.7
Cow	0.4	0.0	0.4	4.1	5.3	3.7	9.0	9.2	10.4
Real estate business, consultancy services	1.8	1.6	4.2	10.6	9.9	9.9	7.5	9.0	10.1
Stone	8.9	6.6	12.9	8.2	9.6	8.8	7.0	8.4	10.0
Ready -made clother, sheets	20.0	12.9	15.0	8.8	7.4	7.5	7.3	8.3	9.3
Soap, detergents	16.3	6.1	5.7	8.0	5.7	6.0	6.1	8.4	9.0
Processed seafood and by products	1.5	2.1	2.9	5.0	5.7	7.0	6.4	7.8	8.8
Beer and liquors	5.2	3.7	6.0	6.0	7.0	5.8	7.7	8.4	8.7
Restaurants	13.7	12.6	11.9	11.1	10.9	9.7	8.2	8.2	8.4
Ciment	1.2	7.4	2.5	5.0	6.1	5.7	5.6	6.9	7.4
Cigarettes and othertobacco products	11.2	12.3	11.4	13.0	11.6	10.7	11.6	7.9	7.1
Science and technology	15.0	12.0	11.2	10.1	7.8	7.3	4.5	5.6	6.9
Communication services	6.2	5.5	5.0	4.9	3.8	3.7	4.1	5.0	5.9
Sugar, refined	2.6	0.1	4.9	4.1	2.6	3.4	3.2	4.0	4.5
Tea, processed	1.7	26.6	3.6	3.9	2.8	1.6	3.1	3.6	3.9
Coffee, processed	3.0	2.1	2.0	2.3	1.9	2.9	2.1	2.8	3.0
Repair of small transport means, motorbikes									
and personal household appliances	3.2	4.2	2.4	3.1	3.4	3.1	3.0	2.3	2.7
Tea	0.1	0.2	0.5	0.7	0.6	1.1	0.9	1.1	1.4
Coffe beans	0.1	0.2	1.0	0.5	0.6	0.4	1.0	1.2	1.3
Poultry	0.2	0.3	0.3	0.5	0.4	0.2	0.6	0.8	0.9
Coal	0.1	0.3	0.6	0.8	0.6	1.7	0.5	0.7	0.8
Cude oil, natural gas	1.8	2.0	2.5	1.3	0.6	1.0	0.6	0.7	0.7

Bricks, tiles	0.4	13.0	0.4	0.5	0.4	0.7	0.4	0.6	0.7
Products of printing activities	0.9	0.5	1.4	0.6	0.4	0.6	0.5	0.5	0.6
Fish - Farming	0.3	0.3	0.2	0.4	0.5	0.6	0.5	0.5	0.6
Non-alcohol water and soft drinks	1.0	0.3	0.1	0.5	0.4	0.7	0.4	0.5	0.6
Fishery	0.2	0.2	0.2	0.4	0.4	0.4	0.5	0.5	0.6
Paddy	0.2	0.4	0.3	0.3	0.2	0.3	0.4	0.4	0.4
Electricity, gas	2.6	3.0	2.7	0.0	0.0	0.0	0.0	0.1	0.1
Pig	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Rice, processed	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Sugarcane	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Association	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Irrigation service	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Agricultural services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Civil construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lottery	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Real estale	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State management	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Veterinary	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Sources: Our calculations based on the GSO data

## 3.1. The structure of domestic supply of goods and services

The output structure has changed in the direction of increased share of industrial activities and decreased share of agriculture, forestry and fishery activities but at the slow speed. During the 2000-08 period, the industrial output structure increased from 55.7 percent to 59.6 percent, meanwhile the share of agriculture, forestry and fishery decreased from 17.9 percent to 13.7 percent and the service output stable at 28 percent. Therefore, over the past ten years, the output share of industrial and construction sector increased by only 4 percentage points.

The agriculture, forestry and fishery output structure has experienced positive change toward significantly increased share of fishery, especially fish-farming. The agriculture output share declined from 79.1 percent in 2000 to 73.8 percent in 2008, forestry from 4.7 percent to 2.7

percent, meanwhile the fishery increased from 16.2 percent to 23.5 percent, especially fish-farming from 7.2 percent to 23.5 percent.

The industrial output structure still follow the tendency of increased share of manufacturing activities and reduced share of mining industries. Compared with 2000, the output share of manufacturing industries risen from 78.7 percent to 85.4 percent, the mining industries fell from 15.8 percent to 9.6 percent and electricity, gas and water supply slightly declined from 5.5 percent to 5 percent.

**Table 10. Structure of Industrial production** 

(*In percentage*)

(In percentage	1996	2000	2005	2006	2007
OVERALL	100	100	100	100	100
Mining	13.84	<b>15.7</b>	11.2	10.3	9.6
Mining of coal	2.38	1.2	1.6	1.6	1.8
Extraction of crude petroleum and natural gas	10.04	13.5	8.7	7.8	6.9
Mining of metal ores	0.28	0.1	0.1	0.2	0.2
Quarrying of stone and other mining	1.15	0.9	0.8	0.7	0.7
Manufacturing	79.93	<b>78.7</b>	83.2	84.5	85.4
Food products and beverages	25.49	24.1	20.6	20.4	20.2
Tobacco products	3.16	2.3	1.6	1.3	1.2
Textiles	5.22	4.6	4	4.8	4.5
Wearing apparel	3.44	3.4	4	4.1	4.2
Tanning and dressing of leather; leather products	4.3	4.3	4.3	4	3.7
Wood and wood products	3.05	1.8	2	1.8	1.8
Paper and paper products	1.85	1.8	1.9	1.9	1.9
Publishing, printing and reproduction of recorded					
media	2.04	1.2	1.3	1.2	1
Coke, refined petroleum products	0.16	0.3	0.2	0.3	0.2
Chemical and chemical products	5.04	5.1	5.6	5.9	5.6
Rubber and plastic products	2.4	3.1	3.9	4.1	4.1
Non-metallic mineral products	7.77	6.4	5.5	5.8	5.3
Basic metal	3.08	2.7	3.8	3.8	4.3
Fabricated metal products, except machinery and					
equipment	2.4	3	4.6	4.9	5.2
Machinery and equipment	1.27	1.2	1.4	1.3	1.5
Office, accounting and computing machinery	0.03	0.5	1.5	1.5	1.7
Electrical machinery and apparatus	1.06	2.3	3.4	3.7	4
Radio and communication equipment and apparatus	2.55	2.2	2.1	1.9	2.2
Medical, precision and optical instruments, watches	0.22	0.3	0.2	0.2	0.3

and clocks					
Assembling and repairing motor vehicles	1.23	1.7	2.9	2.5	2.7
Manufacture and repairing of other transport					
equipment	2	4	4.5	4.3	5
Furniture's	2.07	2.2	4.1	4.7	4.7
Recycling	0.1	0.1	0.1	0.1	0.1
Electricity, gas and water supply	6.23	5.6	5.6	<b>5.2</b>	5
Production, collection and distribution of electricity;					
manufacture of gas, distribution of gaseous fuels	5.65	5.1	5.3	4.9	4.7
Collection, purification and distribution of water	0.58	0.5	0.3	0.3	0.3

Sources: Calculations based on GSO data

The services sector experienced no significant change in output structure and remains heavily depending on few services. In 2008, the main services activities contributed approximately 65 percent of output values of the whole services sector; namely, trade for 33.9 percent, hotels and restaurant for 9.2 percent, public administration 7.8 percent, education and training 6.1 percent and real estate business 4.9 percent. The banking and credit services accounted for 2.6 - 2.8 percent for many years and increased to 3.5 - 3.7 percent in the past two years.

The nonstate sector has played increasingly important role in supplying goods and services, especially the limited liability enterprises, shareholding companies and 100 percent foreign invested enterprises. The share of state owned enterprises in total revenues of whole enterprise sector reduced largely from 54.9 percent in 2000 to 31.8 percent in 2007; at the same time, the share of nonstate enterprises increased from 25.1 percent to 47.3 percent and the foreign invested enterprises from 20 percent to 21.3 percent over the same period (see Table 11). By types of enterprises, the revenue share of the limited liability enterprises risen at largest amount of 10 percentage points, followed by the shareholding companies 9.5 percentage points, and 100 percentage foreign owned enterprises by more than 5 percentage points. Noticeably, the role of joint ventures in providing goods and services declined, around 3.8 percentage points.

**Table 11. Revenue structure by enterprise sectors** 

(In percentage)

	2000	2001	2002	2003	2004	2005	2006	2007
State owned enterprises	54.9	51.2	51.2	46.4	41.2	38.9	35.8	31.5
Central	39.1	37.3	39.1	35.1	31.0	30.7	28.8	25.3
Local	15.8	14.0	12.1	11.2	10.2	8.1	7.1	6.2
Nonstate enterprises	25.1	29.0	30.4	33.6	37.1	39.4	42.0	47.3

Collective	1.2	1.1	0.9	0.9	0.7	0.8	0.7	0.7
Private	8.8	8.6	7.7	7.2	7.9	8.0	8.2	7.5
Partnership	0.0	0.0	0.2	0.7	0.0	0.0	0.0	0.0
Limited liability	13.1	15.2	17.0	18.8	20.6	20.5	21.3	23.1
Shareholding with state owners	1.3	2.5	2.5	3.0	3.6	4.8	5.1	5.7
Shareholding without state owners	0.8	1.6	2.0	3.0	4.2	5.3	6.7	10.3
FDI	20.0	<b>19.7</b>	18.5	20.1	21.7	21.7	22.2	21.3
100% foreign owned	7.3	8.0	8.0	9.0	10.7	11.0	12.3	12.4
Joint ventures	12.7	11.7	10.5	11.1	11.0	10.7	9.9	8.9

Source: General Statistic Office

# 3.2. Structure of imported goods and services

The structure of imported goods and services have had no cleat changes and largely focused on production mean, especially materials and fuels. The production means accounted for 92-94 percent of total import values with machineries and equipments for 25-31 percent and raw materials and fuels for 64-68 percent. The share of consumer goods fluctuated in the range of 6-8 percent (see Table 12). Vietnam's importation focuses on few commodities. In 2008, the five top imported goods accounted for nearly 50 percent of import values, including machineries, equipments for 17.3 percent, gasoline for 13.6 percent, steels for 8.3 percent, vacant for 5.5 percent and computers, electronics and spare parts for 4.6 percent.

**Table 12. Import structure by commodity groups** 

(In percentage)

	1995	2000	2005	2006	2007	2008
Mean of production	84.8	93.8	91.9	92.2	92.6	93.6
Machinery, instrument, accessory	25.7	30.6	25.3	24.6	28.6	26.6
Fuels, raw material	59.1	63.2	66.6	67.6	64	67
Consumer goods	15.2	6.2	8.1	<b>7.8</b>	7.4	6.4
Food		0	0.01	0.02	0	
Foodstuffs	3.5	1.9	3	2.8	2.5	
Pharmaceutical and medicinal products	0.9	2.2	1.4	1.3	1.2	
Others	10.8	2.1	3.7	3.7	3.7	

Source: General Statistics Office

Vietnam's imported merchandises are mainly from East Asian countries and increasingly depended on China source. The share of goods imported from East Asian countries in Vietnam's total imported goods and services is stable in the range from 76-79 percent. The largest import source remains China, followed by Japan, Korea, Singapore and Hongkong, all accounting for 58-64 percent of import values of Vietnam. The import share from China has steadily increased from 9 percent in 2000 to 19.4 percent in 2008, becoming the largest import sources of Vietnam. At the same time, the import share from East Asian developed sources reduced significantly from 55.2 percent to 41 percent.

For almost major imported goods<sup>2</sup>, China is the main source. China is the largest import sources for chemicals (accounting for 26.1 percent of Vietnam's total imported chemicals values), chemical products (16.5 percent), automobile (25.1 percent), machineries, equipments, spare parts (27.6 percent), fertilizers (48.9 percent), steel (34.4 percent) and fabrics of all kinds (34.6 percent). Furthermore, China is also the second or third largest import sources of computers and spare parts (17.6 percent), textile and garment materials (15.3 percent), completed motorbike (26.3 percent), automobile spare parts (15.4 percent), woods and wood materials (11.8 percent).

The services share in total values of imported goods and services has experienced almost no change and depend on few services. During the 2005-08 period, the services share in total imported goods and services accounted for 9-10 percent. Given the rapid development of trade, the trade service imported in total values of imported services steadily increased from 33.7 percent in 2005 to 52.8 percent in 2008. The tourism is the second largest imported services, but its share declined gradually from 20.1 percent to 16.4 percent. Seth third largest imported services, air transportation, followed the decreasing tendency in import share, from 14.1 percent to 10.1 percent. The share of financial services also reduced from 5.1 percent to 2.9 percent.

## 4. The structure of aggregate demand for goods and services

Vietnam's aggregate demand is more and more depend on exports and at the some time less on domestic consumption. Over the 2000-2008 period, the export share in total aggregate demand increased by 2.9 percentage points, while the share of domestic consumption declined by 4.9 percentage points. The aggregate demand for goods and services also replied more on

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<sup>&</sup>lt;sup>2</sup> Those goods with import values higher than \$US 1 billion in 2008.

other aggregate demand components; particularly, the investment share increased by 1.3 percentage points, intermediate consumption share increased by 0.7 percentage points (see Table 13). Given these changes in the aggregate demand structure, until year 2008 the intermediate consumption remains the largest components of aggregate demand, account for 43.7 percent of total aggregate demand; export replaced the domestic consumption to be the second largest components, accounting for 22.9 percent; the domestic consumption declined as share of aggregate demand to 21.5 percent; investment remains the smallest components of aggregate demand with the share of 12 percent.

Table 13. Aggregate demand structure

(*In percentage*)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Intermediate consumption	43.0	43.9	43.7	43.0	42.3	43.2	43.8	44.2	43.7
Investment	10.7	11.1	11.6	12.1	11.9	11.6	11.5	12.6	12.0
Fixed investment	10.0	10.4	10.9	11.4	11.1	10.7	10.4	11.2	10.5
Inventories	0.7	0.7	0.7	0.7	0.7	0.9	1.1	1.4	1.5
Final consumption	26.4	25.4	24.9	24.7	23.9	22.7	21.7	20.7	21.5
Government	24.1	23.2	22.7	22.6	21.7	20.7	19.8	18.9	19.7
Private	2.3	2.3	2.2	2.2	2.1	2.0	1.9	1.8	1.8
Export	19.9	19.5	19.8	20.2	22.0	22.6	23.0	22.5	22.9

Source: Our calculations based on GSO and ADB data

Vietnam is among few countries in the region depending heavily on export and investment demands. In 2008, the export over GDP ratio was at 78.2 percent, the third largest in the region, behind Hong Kong and Malaysia (see Table 14). Similarly, Vietnam's ratio of investment over GDP in 2008 was 41.1 percent, the second highest ratio in the regions, only behind China.

Table 14. The export over GDP ratio

(In percentage)

		\ · F				
	1995	2000	2005	2006	2007	2008
Vietnam	32.8	55.0	69.4	73.6	76.9	78.2
Japan	9.2	11.0	14.3	16.1	17.6	17.4
Korea	28.8	38.6	39.3	39.7	41.9	52.9
Hong Kong	143.2	143.3	198.7	205.5	208.0	212.5

Taiwan	47.2	53.8	64.2	69.7	73.5	74.2
Malaysia	94.1	119.8	117.5	116.5	110.5	103.6
Thailand	41.8	66.8	73.6	73.7	73.2	76.4
Indonesia	26.3	41.0	34.1	31.0	29.4	29.8
The Philippine	36.4	55.4	47.6	47.3	42.5	36.9
China	20.2	23.3	5.6	7.9	9.1	8.0

Source: Our calculations based on Asia Development Bank data

Table 15. The investment over GDP ratio

(In percentage)

( <i>F</i>						
	1995	2000	2005	2006	2007	2008
Vietnam	27.1	29.6	35.6	36.8	43.1	41.1
Japan	28.4	25.4	23.6	23.8	24.1	23.5
Korea	37.7	30.6	29.7	29.6	29.4	31.4
Hong Kong	34.1	27.5	20.6	21.7	20.9	20.4
Taiwan	25.2	23.3	21.4	21.5	21.5	21.2
Malaysia	43.6	26.9	20.0	20.5	21.7	19.1
Thailand	42.1	22.8	31.4	28.4	26.6	28.8
Indonesia	31.9	22.2	25.1	25.4	24.9	27.8
The Philippine	22.5	21.2	14.6	14.5	15.4	15.2
China	41.9	35.1	44.0	44.5	43.1	44.4

Source: Our calculations based on Asia Development Bank data

There are significant number of industries be to changes on demands for intermediate consumption, investment or export. The industries with their products being mainly for productive inputs<sup>3</sup> account for 15 percent of the economy's total aggregate demand. These include business services, animal foods, industrial plantation, steel, cement, construction materials, gas, fertilizers. The industries producing goods and services mainly for investment demand accounted for 13 percent of aggregate demand and include transport services, civil and engineering construction, shipments, automobile and specialized machineries. The industries

<sup>3</sup> Those industries having more than 80 percent of demand for intermediate inputs of other industries.

producing goods and services mainly for export account for 9 percent of aggregate demand and comprises crude oil, raw rubbers, coffee beans, footwares. In short, approximately 37 percent of Vietnam's aggregate demand are strongly toward demand for production input, investment or exports.

Table 16. Demand structure by goods and services

	Percentage
Plastic (including semi-plastic products)	133
Basic inorganic chemicals	120
Bricks, tiles	109
Irrigation service	100
Forestry	99
Sand, Gravel	97
Paddy	95
Fishery	88
Real estate business and consultancy services	87
Fibers, thread	87
Real stale	87
Cement	86
Inl, varnish and other painting materials	86
Basic organic chemicals	84
Sugarcane	83
Products of leather tanneries	81
Concrete, mortar and other cement products	77
Electricity, gas	74
Glass and glass products	73
Paper pulpand paper products and by products	72
Motor vehicles, motor biles and spare parts	71
Chemical fertilizer	71
Products of publising house	69
Non-ferrous metals and products(except machinery equipment)	67
Weaving of cloths	66
Gasoline, lubricants (already refined)	65
Communication services	64
Pesticides	62
Machinery used for broadcasting, television and information activities	61
Water	61
Processed rubber and by products	60
Paint	60
Tea	57

Metallic ore	55
Veterinary	54
Ferrous matals and products (except machinery equipment)	53
Animal feeds	52
Coal	48
Precise and optics equipment, meter (all kinds)	47
Banking, credit, treasury	47
Fertilizer	46
Bicycles and spare parts	46
Cow	46
Products of printing activities	43
Processed, preserved meat and by-products)	39
Sugar, refined	39
Repair of small transport means, motorbikes	38
Processed wood and wood products	35
Stone	34
Science and technology	33
Other Livestock	32
Home appliances and its spare parts	31
Processed and preserved fuits and vegetables	28
Leather goods	28
Air transport services	28
Raw rubber	28
Road Transportation	27
Health medicine	27
Automobiles	27
Fish - Farming	27
Coffee, processed	26
Health instrument and apparatus	25
Water transport services	24
Milk, butter and other dairy products	24
Electrical machinery	22
Cigarettes and othertobacco products	21
Hotels	20
Poultry	20
Tea, processed	19
Rice, processed	19
General -purpose machinery	18
Ceramis and by products	18
Processed seafood and by products	18
Culture and sport	17
Perfumes and other toilet preparation	16
Restaurants	16

Carpets	16
Soap, detergents	14
Alcohol, beer and liquors	13
Pig	12
Ready -made clother, sheets	12
Weaving and embroidery of textile -based goods (except carpets)	10
Education and training	9
Non-alcohol water and soft drinks	9
Insurance	9
Railway transport services	7
Association	7
Processed vegetable, and amimals oils and fats	7
Cude oil, natural gas (except exploration)	6
Health care, social relief	5
Cakes, jams, candy, coca, chocolate products	4
Beer and liquors	4
Coffe beans	4
State management, defence and compulsory social security	0
Lottery	0
Civil construction	0
Tourism	0

Source: Our calculations based on GSO data

Table 17. Share of consumer goods in demand for individual goods and services

	Percentage
State management, defense and compulsory social security	100
Processed vegetable, and animals oils and fats	98
Beer and liquors	97
Non-alcohol water and soft drinks	89
Weaving and embroidery of textile -based goods (except carpets)	86
Health care, social relief	85
Pig (All kinds)	83
Health medicine	81
Cakes, jams, candy, coca, chocolate products	81
Poultry	80
Soap, detergents	74
Cigarettes and other tobacco products	72
Perfumes and other toilet preparation	70

Insurance	69
Education and training	67
Milk, butter and other dairy products	64
Lottery	64
Association	61
Other Livestock	61
Science and technology	60
Products of printing activities	59
Sugar, refined	58
Health instrument and apparatus	58
Culture and sport	57
General -purpose machinery	56
Processed, preserved meat and by-products)	55
Alcohol, beer and liquors	54
Railway transport services	54
Cow	54
Tea, processed	53
Automobiles	50
Fish - Farming	49
Other crops	48
Hotels	47
Home appliances and its spare parts	46
Rice, processed	46
Restaurants	44
Water transport services	42
Air transport services	42
Carpets	40
Tourism	40
Repair of small transport means, motorbikes and personal household appliances	39
Water	39
Motor vehicles, motor bales and spare parts	36
Precise and optics equipment, meter (all kinds)	35
Weaving of cloths (all kinds)	30
Processed and preserved fuits and vegetables	29
Road Transportation	29
Electricity, gas	26
Processed rubber and by products	23
Products of publising house	22
Paper pulpand paper productsand by products	22
Banking, credit, treasury	21
Ready -made clother, sheets (all kinds)	20
Gasoline, lubricants (already refined)	20
Ceramis and by products	18

Sugarcane	17
Bicycles and spare parts	14
Coal	14
Products of leather tanneries	13
Processed wood and wood products	13
Ferrous matals and products (except machinery equipment)	12
Leather goods	11
Real estate business and consultancy services	11
Processed seafood and by products	11
Communication services	9
Coffee, processed	9
Real estale	9
Machinery used for broadcasting, television and information activities	9
Fishery	6
Glass and glass products	4
Tea	2
Fibers, thread (all kinds)	1
Forestry	1
Non-ferrous metals and products(except machinery equipment)	1
Plastic (including semi-plastic products)	0
Basic inorganix chemicals	0
Bricks, tiles	0
Irrigation service	0
Other Agricultural services	0
Sand, Gravel	0
Paddy (all kinds)	0
Ciment	0
Inl, varnish and other painting materials	0
Basic organix chemicals	0
Concrete, mortar and other cement products	0
Chemical fertilizer	0
Pesticides	0
Paint	0
Metallic ore	0
Veterinary	0
Animal feeds	0
Fertilizer	0
Stone	0
Raw rubber	0
Electrical machinery	0
Cude oil, natural gas (except exploration)	0
Coffe beans	0
Civil construction	0

Source:Our calculations based om GSO data

Table 18. Share of export goods in demand for individual goods and services

<b>1</b> 3	Percentage
Coffe beans	96
Cude oil, natural gas (except exploration)	94
Raw rubber	72
Processed seafood and by products	70
Ready -made clother, sheets (all kinds)	68
Leather goods	62
Tourism	60
Processed wood and wood products	57
Bicycles and spare parts	48
Ceramis and by products	45
Metallic ore	45
Road Transportation	44
Carpets	44
Electrical machinery	44
Processed and preserved fuits and vegetables	42
Tea	41
Restaurants	40
Railway transport services	39
Coal	37
Lottery	36
Water transport services	34
Hotels	34
Banking, credit, treasury	32
Association	32
Air transport services	30
Rice, processed	30
Communication services	27
Culture and sport	26
Fish - Farming	25
Machinery used for broadcasting, television and information activities	25
Education and training	24
Insurance	23
Repair of small transport means, motorbikes and personal household appliances	22
Other crops	21
Precise and optics equipment, meter (all kinds)	20
Processed vegetable, and amimals oils and fats	20

Ferrous matals and products (except machinery equipment)	17
Gasoline, lubricants (already refined)	15
Processed rubber and by products	15
Cakes, jams, candy, coca, chocolate products	13
Cigarettes and othertobacco products	12
Soap, detergents	12
Non-ferrous metals and products(except machinery equipment)	12
Glass and glass products	11
Perfumes and other toilet preparation	11
Health care, social relief	11
Milk, butter and other dairy products	10
Alcohol, beer and liquors	10
Fibers, thread (all kinds)	9
Health instrument and apparatus	8
Coffee, processed	8
Other Livestock	7
Science and technology	6
Automobiles	6
Fishery	6
Pig (All kinds)	6
Health medicine	6
Home appliances and its spare parts	6
Paper pulpand paper productsand by products	6
Processed, preserved meat and by-products)	6
Basic inorganix chemicals	4
Weaving of cloths (all kinds)	4
Real estale	4
Fertilizer	3
Paint	3
Animal feeds	3
Sand, Gravel	3
Tea, processed	3
Weaving and embroidery of textile -based goods (except carpets)	3
Products of publising house	2
Pesticides	2
Plastic (including semi-plastic products)	2
Products of leather tanneries	2
Sugar, refined	2
Real estate business and consultancy services	2
Bricks, tiles	2
Stone	1
Chemical fertilizer	1
Non-alcohol water and soft drinks	1

Concrete, mortar and other cement products	1
General -purpose machinery	1
Basic organix chemicals	1
Motor vehicles, motor biles and spare parts	1
Inl, varnish and other painting materials	1
Forestry	1
Beer and liquors	0
Ciment	0
Electricity, gas	0
Poultry	0
Sugarcane	0
Paddy (all kinds)	0
Products of printing activities	0
State management, defence and compulsory social security	0
Cow (All kinds)	0
Water	0
Irrigation service	0
Other Agricultural services	0
Veterinary	0
Civil construction	0

Source: Our calculation based on GSO data

The final consumption of goods and services experienced no significant structural change and still focuses on some groups of goods and services. Vietnam's final consumption is largely consist of rice, foodstuff, gasoline, motorcycle and services of restaurants, health care, education and training. These major consumption goods and services accounted for 50 percent of total final consumption in Vietnam in 2007.

Overall, the investment structure mainly toward fixed and long term investment and consist of few commodities. The fixed investment accounted for 92 percent of total investment and remaining 8 percent for working capital, mainly inventories. The goods for fixed investment are mainly products of construction industry. In 2007, there were 61.3 percent of fixed investment for construction products, of which housing for 28.4 percent, engineering construction for 28.1 percent and civil construction for 5.3 percent. The second largest goods for fixed investment is equipments and health facilities, each account for 10.7 percent of fixed investment. The third largest goods, accounting for 4 percent of total fixed investment, are computers and ships.

Although accounting for insignificant in total investment demand, inventories demand has been largely fluctuated for individual goods. Overall, demand for inventories investment accounted for small portion in total investment demand and the actuations of this demand component as a whole has had almost on impact on the investment demand of whole economy. However, analyzing at individual goods indicates that for some the demand for inventories investment is the biggest and strongest fluctuated and therefore had had the most influence on investment demand for the goods<sup>4</sup>. In 2007, the inventories investment for 37 over 138 goods and services reduced by more than 556 trillion VND, being similar to total fixed investment. At the same time, inventories investment for 40 over 138 goods and services increased by more than 571 trillions VND. As a results, the inventories investment of the economy as a whole in 2007 increased by 15 trillions VND. The inventories investment fluctuated largely with the agricultural products such as rice, coffee, paddy, rubber and some manufacturing products of garments, footwares and processed fishery.

Vietnam's export structure maintains the tendency of reducing the export of raw or primarily goods, and increasing export of processed and manufactured goods; however, these changes have been slow. The share of raw and primary goods in Vietnam's total export values has fallen from 55.8 percent in 2000 to 46.6 percent in 2007, meanwhile the share of processed or refined ones risen from 44.2 percent to 55.4 percent. The export structure has still replied largely on some groups of goods. The top ten of exported goods has accounted for more than 67 percent of total export values in 2008 and basically remained crude oil (16.6 percent), garments (14.5 percent), footwares (7.5 percent), fishery (7.3 percent), rice (4.6 percent), wood products (4.4 percent), computers and electronics (4.3 percent), coffee (3.2 percent), rubber (2.5 percent) and coal (2.2 percent). Therefore, the major export goods remain the raw or primary ones.

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<sup>&</sup>lt;sup>4</sup> This happen as a result of accounting principles of national economy. When enterprises produce goods and services more than the demand for them, the unsold goods and services are accounted as an increase in inventories investment by enterprises. In the follow accounting year, the enterprises can sell their inventories rather than produce more products. These sold goods are account as a decrease in inventories investment by enterprises. For individual goods, the fluctuation in inventories are extremely large, reflecting changes in the demand for the products. However, at the level of a economy as a whole, there are increases in inventories for some goods but reductions for others. The net impact may be small. As a result, the demand for inventories of the whole economy is usually small as compared with fixed investment.

Basically, the major markets for Vietnam's export market have been unchanged. The top five markets for Vietnam's export goods have been unchanged over the past years and accounted for more than 50 percent of country's total export values, particularly, the United States (18.9 percent), Japan (13.6 percent), China (7.2 percent), Australia (6.7 percent) and Singapore (4.2 percent). The export share to the EU market has no large change, around 18 – 20 percent.

The United States has increasingly confirmed the largest export market for almost of Vietnam's major export goods in particular and total exports in general. The US share in Vietnam's total export values increased significantly from only 5.1 percent in 2000 to the stable level of 19 percent in recent years. The United States is also the largest export market for garments (accounted for 56 percent of Vietnam's garment export values in 2008), footwares (22.6 percent), wood products (37.6 percent). It is also the second largest market for other major export goods, such as fishery (16.4 percent), coffee (10 percent) and computers (11.6 percent).

The share of services in total export values of goods and services has been almost unchanged and focused on few services. The share of services exports in total exports of goods and services during the 2005-2008 period went up and down in the range of 10 - 12 percent. Services exports came mainly from three types of services. In 2008, tourism is the largest foreign exchanges sources, accounting for 56.7 of total values of services export, followed by air transportation (18.6 percent) and maritime transportation (14.6 percent). The financial services accounted for 3.2 percent of services exports.

### 5. Cost structure of Vietnam's economy

The Vietnam's economy cost structure has changed in the direction to increase the intermediate consumption and, at the same time, to reduced the labour compensation and profits or value added. Over the 2003-07 period, the share of intermediate consumption in total output values increased by 5.1 percentage points and trade margin by 3.9 percentage points (see Table 19). The share of labour compensation and enterprise profits in total output values declined largely by 4.9 percentage points and 4. Percentage points, respectively. The share of fixed consumption, taxes, and transportation costs have been almost unchanged. Therefore, until 2007, the intermediate consumption remain the largest cost components and continue the increasing tendency in Vietnam's economy cost structure. This implies that changes in prices of production input materials have increasing impacts on costs of goods and services produced in Vietnam.

Table 19. Cost structure of the economy

(*In percentage*)

52.7	57.8
22.9	18.0
4.7	4.4
1.6	5.5
1.1	1.2
4.2	4.5
12.9	8.5
100.0	100.0
	22.9 4.7 1.6 1.1 4.2 12.9

Source: Our calculations based on GSO data

The important part of goods and services produced domestically have been very sensitive to the changes in prices of production inputs or labour costs. The industries that are very sensitive to changes in prices of material inputs <sup>5</sup> accounted for 16 percent of total output values in 2007. These industries are animal feed, husking and flour production, electronic device, computer, vegetable and animals oils and fats, steel, electric conductor manufacture... (see Table 20). The industries are sensitive to changes in labour costs <sup>6</sup> in Vietnam are mainly plantation activities and services of public administration and business consultancy (see Table 21). These labour costs sensitive industries account for 13 percent of total output values in 2007. Therefore, the price management for import part of the economy should be focus on monitoring the change in prices of material inputs and labour costs.

Table 20. Share of material inputs in output values

	% output values
Animal, cattle and fishery feed	96.7
Husking and flour production	96.5
Electronic device, computer and peripheral manuafacture	95.4
Vegetable and animals oils and fats	91.8
Iron,steel,cast-iron	90.7

<sup>5</sup> Those industries having material costs account for more than 75 percent of output values.

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<sup>&</sup>lt;sup>6</sup> Those industries having labour costs accounting for more than 40 percent of output values.

Processed, preserved fishery and by-products	90.3
Electric conductor manufacture	88.9
Processed, preserved meat and by-products	88.7
Electrical household appliance	87.6
Consumer electronic equipment	85.4
By-product rubber manufacture	85.2
Jewelry, fasle jewelry and related details;	85.1
Processed and preserved fruit and vegetables	84.9
Textile	84.5
making refined oil	84.1
telecommunication machinery & equipment	84.1
basic chemicals, fertilizer and nitrogen compound, plastic and primary	
synthetic rubber manufacture	83.6
tobacco products	83.6
motor, electric generator, power transformers manufacture	83.3
Coke coal	83.1
Building ships and boats	82.6
Paper and by-paper products	82.1
Special-purpose machinery manufacture	82.1
Airline transport	82.0
Supporting service operation for exploiting mine and ore	81.9
mental manufacture (except iron, steel, cast-iron), mental product	
(machinery,equipment)	81.8
general-purpose machinery manufacture	81.6
manufacturing car engines with tractor (except automotive)	80.9
by-product plastic manufacture	79.7
Clothing production	78.4
sandal and shoes manufacture	78.2
cell and battery manufacture	77.4
advertising and market research	76.8
print; copy (all kinds)	76.7
Repair service and equipment and machinery maintenance, other processed	
industrial products manufacture	76.4
livestock	75.8
fish farming	75.7
Publishing operation	75.2
electric light equiptment manufacture	74.1
Making bed, cabinet, tables, chairs	72.7
railway and road construction, useful construction, other technical	
construction	72.5
medical equipment, dental, Orthopedics and rehabilitation manufacture	71.8
glass and by-product glass manufacture	71.3
Processed wood and by-wood products, bamboo (except except bed, cabinet,	71.0
tables, chairs)straw products and entangle material	71.0

activities of special-purpose construction	70.7
medicine, chemical prophylaxis and pharmacy manufacture	70.7
manufacturing other non-metallic mineral products	70.5
manufacturing drinks	69.4
Food Service	69.3
Financial services (except insurance and social insurance)	68.3
milk and by-product milk	67.9
coal mining	67.4
steam distribution and manufacture, hot water, air conditioner and ice	
producing	61.8
fishery	61.7
bus transport; other road transport; pipeline transport	58.9
Postal and delivery	57.7
Construction (all kinds)	57.7
waterway transport	57.5
heathcare activities	53.5
drainage and waste water handle, waste	53.0
Exploitation of stone, sand, gravel, clay	52.4
Film, television, recording and music publishing operations	51.2
railway transport	49.2
Administrative supporting activities, office support and other business	
supporting activities	48.9
activities of lottery, Bet and gamble	46.1
Gas, fuel distribution by pipeline	44.8
electric transmission, distribution and manufacture	44.8
annual crop	44.4
forestry service, planting tree	43.4
activities of work and job service	42.2
Research and development	41.2
activities of headquarters office; consulting activities for management	40.6
architectural, testing and analysis technique activities	40.6
Exploitation, processing and water supply	39.2
Creative activities, arts and entertainment, library services, archives, museums	
and other cultural services	38.9
rent machinery and equipment (no operator), personal household applicance	20.1
for rent	38.1
perennial plant	37.8
quarying mental ore, other mining	37.7
Care services, centralized nurse and non-centralized social supporting services	35.5
parking and supporting services for transportation	35.4
travel agency activities, tour business; supporting services of promoting and	35.1
organizing tour	33.1
Legal activities, accounting and audit insurance and social re-insurance (except compulsory social insurance)	33.9 33.0
misurance and social re-insurance (except compulsory social misurance)	33.0

activities of sanitation services for house and landscape	32.8
sports; entertainment	32.7
repair service for computer ,other service activities for personal household	
appliances	32.6
activities of communist Party activities, political and social organization, state	
management, defence and compulsory social sercurity	31.8
logging and other forest products	31.4
college training, university and post-graduate	31.3
Telecommunication	31.3
programming computer service, consulting and other informaion services	31.0
Radio, television operations	30.8
household activities ;self-consumption products of household activities of	
organizations and intternational offices	30.0
Sell, car repairing and other car engine repairing, sell, maintenance and	
repairing car, motorbikes, accessories and auxiliary parts of motorbike and car	29.3
Veterinary activities	28.7
Education and training( except college, university and postgraduate)	27.4
residental service	22.9
Wholesale (except automobile, moto, motorbike and other car engines ), retail	
(except automobile, moto, motorbike and other car engines)	22.6
real estate business operation	22.2
crude oil exploitation; natural gas exploitation	14.4
Investigation activities and security	13.0
•	

Source: Calcualtions based on GSO data

Table 21. Share of labour costs in output values

	% output values
Investigation activities and security	68.2
other products (except wood and other forestry products) forestry servicing	
operation	66.4
Veterinary activities	65.5
logging and other forest products	64.5
household activities; self-consumption products of household activities of	
organizations and intternational offices	57.0
repair service for computer ,other service activities for personal household	
appliances	56.9
activities of communist Party activities, political and social organization, state	
management, defence and compulsory social sercurity	53.1
perennial plant	52.1
Education and training( except college,university and postgraduate)	51.5

annual crop	51.1
activities of sanitation services for house and landscape	51.0
real estate business operation	48.4
Legal activities, accounting and audit	47.8
programming computer service, consulting and other informaion services	47.3
college training, university and post-graduate	46.7
forestry service, planting tree	44.8
architectural, testing and analysis technique activities	41.9
Care services, centralized nurse and non-centralized social supporting services	41.4
insurance and social re-insurance (except compulsory social insurance)	39.0
Creative activities, arts and entertainment, library services, archives, museums	
and other cultural services	39.0
rent machinery and equipment (no operator), personal household applicance for	
rent	38.7
Research and development	36.6
activities of headquarters office; consulting activities for management	36.2
Sell, car repairing and other car engine repairing, sell, maintenance and repairing	
car, motorbikes, accessories and auxiliary parts of motorbike and car	36.0
drainage and waste water handle, waste	35.9
activities of work and job service	35.6
Construction (all kinds)	34.4
heathcare activities	34.0
sports; entertainment	33.0
Wholesale (except automobile, moto, motorbike and other car engines), retail	32.5
fishery	32.4
Film, television, recording and music publishing operations	30.6
Radio, television operations	29.6
Other professional ,sciencetific and technological	28.6
travel agency activities, tour business; supporting services of promoting and	27.0
organizing tour	27.8
quarying mental ore, other mining	26.4
Administrative supporting activities, office support and other business supporting	24.6
activities  has transports other road transports pipeline transport	24.6 24.5
bus transport; other road transport; pipeline transport residental service	
Food Service	23.7
	23.5
Exploitation, processing and water supply	23.1
other agricultural activities and agricultural services	22.3
railway transport	22.1
Telecommunication	21.3
fish farming steam distribution and manufacture, hot water, air conditioner and ice	20.8
producing	20.8
Exploitation of stone, sand, gravel, clay	20.8
Exploitation of stone, sand, stavel, oray	20.0

electric transmission, distribution and manufacture	20.2
Gas, fuel distribution by pipeline	20.2
livestock	20.0
parking and supporting services for transportation	19.8
Postal and delivery	19.5
Processed wood and by-wood products, bamboo (except except bed, cabinet,	
tables, chairs)straw products and entangle material	17.9
coal mining	17.4
Making bed, cabinet, tables, chairs	16.7
waterway transport	16.0
Clothing production	15.8
sandal and shoes manufacture	14.4
railway and road construction, useful construction, other technical construction	14.2
activities of special-purpose construction	13.7
medical equipment, dental, Orthopedics and rehabilitation manufacture	12.7
advertising and market research	12.5
repair service and equipment and machinery maintenance, other processed	
industrial products manufacture	12.5
manufacturing drinks	12.2
activities of lottery, Bet and gamble	12.1
medicine, chemical prophylaxis and pharmacy manufacture	11.6
supporting service operation for exploiting mine and ore	11.6
jewelry, fasle jewelry and related details; musical instrument; fit tools, sports,	
toys, games manufacture	10.2
other electrical machinery and optical products	9.4
manufacturing other non-metallic mineral products	9.2
print; copy (all kinds)	9.1
special-purpose machinery manufacture	8.9
Coke coal	8.4
Publishing operation	7.5
other good manufacture	7.5
other electric equipments manuafacture	7.5
mental manufacture (except iron, steel, cast-iron), mental product	
(machinery,equipment)	7.0
Building ships and boats	7.0
motor, electric generator, power transformers manufacture	6.9
glass and by-product glass manufacture	6.8
general-purpose machinery manufacture	6.6
electric light equiptment manufacture	6.1
processed and preserved fruit and vegetables	5.8
by-product plastic manufacture	5.7
Paper and by-paper products	5.7
other chemicals, man-made fibers manufacture	5.5

milk and by-product milk	5.4
cell and battery manufacture	5.1
Financial services (except insurance and social insurance)	4.5
by-product rubber manufacture	4.5
processed, preserved meat and by-products	4.4
telecommunication machinery & equipment	3.7
processed,preserved fishery and by-products	3.7
airline transport	3.7
manufacturing car engines with tractor (except automotive)	3.5
tobacco products	3.5
textile	3.4
other transport means manufacture (ships and boats)	3.1
electrical household appliance	3.0
consumer electronic equipment(refrigerator,dishwasher,washing machine,dust	
allayer)	2.5
basic chemicals, fertilizer and nitrogen compound, plastic and primary synthetic	2.4
rubber manufacture	2.4
electric conductor manufacture	2.3
crude oil exploitation; natural gas exploitation	1.6
Manufacturing iron, steel, cast-iron	1.5
making refined oil	1.5
manufacturing vegetable and animals oils and fats	0.7
electronic device, computer and peripheral manuafacture	0.6
husking and flour production	0.2
manufacturing animal,cattle and fishery feed	0.0

Source: Calcualtions based on GSO data

Few material inputs have strong influences on production costs in Vietnam. The input of steel has the strongest impact on production costs as this input accounted for 5 percent of total output values of the economy, followed by gasoline for 3 percent, animal feeds and paddy for 2-3 percent, plastic, electricity, cement, textile and fertilizers for 1-2 percent. These major production inputs in combination accounted for 25 percent of total output values of the economy. The inflation control in Vietnam should be pay special attention to the fluctuation in prices of these inputs.

## 6. Impacts of changes in final demand for industries

The following quantitative analyses are based on the Vietnam 2003 Social Account Matrix. These quantitative analyses indicate the impacts of one unit increase in final demand for

individual industries on supply, domestic production, labour and capital incomes, household and enterprise incomes, and rural and urban household incomes of the whole economy of Vietnam.

Increases in final demand for agriculture, forestry and fishery products have had strongest impacts on supply in the domestic markets. Table 22 shows that generally, the goods and services having the largest impacts on goods and services supply of the whole economy are agriculture, forestry and fishery goods. Particularly, if the final demand for rice, pig, processed seafood, meats, sugar, tea and irrigation services increase by one unit, the value of supply of goods and services of the whole economy would increased by more than 3 units. The goods and services have smallest impacts on total supply are mainly the manufacturing products, especially the machineries and garments wit the impacts of less than 1.5 units.

Table 22. Impact of one unit increase in respective on total supplies of goods and services

	Impact (units)
Rice, processed	3.612
Pig	3.294
Processed seafood and by products	3.266
Processed, preserved meat	3.232
Sugar, refined	3.145
Tea, processed	3.117
Paddy	3.100
Products of printing activities	3.015
State management, defence and compulsory social security	3.003
Irrigation service	3.002
Cow	2.995
Bricks, tiles	2.983
Coffee, processed	2.979
Association	2.971
Animal feeds	2.964
Fish - Farming	2.958
Poultry	2.946
Ciment	2.945
Sugarcane	2.887
Stone	2.879
Products of publising house	2.872
Veterinary	2.866
Civil construction	2.864
Metallic ore	2.863

Non-alcohol water and soft drinks	2.855
Concrete, mortar and other cement products	2.824
Tea	2.811
Cakes, jams, candy, coca, chocolate products	2.796
Motor vehicles, motor biles and spare parts	2.786
Fishery	2.765
Ceramis and by products	2.760
Trade	2.752
Leather goods	2.746
Ready -made clother, sheets	2.732
Coal	2.728
Beer and liquors	2.655
Coffe beans	2.650
Water	2.635
Processed and preserved fuits and vegetables	2.633
Education and training	2.630
Soap, detergents	2.617
Processed wood and wood products	2.580
Restaurants	2.566
Science and technology	2.530
Real estale	2.518
Cude oil, natural gas	2.499
Health care, social relief	2.475
Electricity, gas	2.465
Real estate business and consultancy services	2.464
Air transport services	2.456
Lottery	2.446
Milk, butter and other dairy products	2.431
Forestry	2.415
Bicycles and spare parts	2.405
Pesticides	2.395
Weaving and embroidery of textile -based goods	2.351
Perfumes and other toilet preparation	2.349
Processed rubber and by products	2.346
Glass and glass products	2.243

Home appliances and its spare parts	2.209
Water transport services Communication services Sand, Gravel Cigarettes and othertobacco products	2.188 2.167 2.158 2.154
Alcohol, beer and liquors Hotels Raw rubber Paper pulpand paper productsand by products	2.147 2.131 2.129 2.087
Fertilizer Road Transportation Repair of small transport means, motorbikes and personal household appliances	2.039 2.005 1.982
Paint Culture and sport Tourism Chemical fertilizer Health medicine Banking, credit, treasury Health instrument and apparatus Ferrous matals and products (except machinery equipment)	1.933 1.916 1.915 1.899 1.872 1.867 1.844 1.808
Weaving of cloths Automobiles Basic organix chemicals Processed vegetable, and amimals oils and fats	1.793 1.786 1.702 1.701
Fibers, thread Carpets Railway transport services Machinery used for broadcasting, television and information activities	1.672 1.668 1.645 1.641
Insurance Gasoline, lubricants (already refined)	1.628 1.598
Basic inorganix chemicals Non-ferrous metals and products(except machinery equipment)	1.569 1.550
General -purpose machinery Electrical machinery	1.523 1.487

Products of leather tanneries	1.449
Plastic (including semi-plastic products)	1.404
Inl, varnish and other painting materials	1.287
Precise and optics equipment, meter	1.187

The increases in final demand for agriculture, forestry, and fishery goods have also strongest influence on domestic production. It can be seen from Table 23 that the goods and services having strongest or smallest impacts on the total supplies of goods and services are also the ones that have strongest or smallest influences on domestic productions. Specially, for the goods and services having the strongest impacts, one unit increases in those goods and services would make the domestic production increased from 2.4 to 3 units. Meanwhile, for ones having the smallest impacts, the impacts are less than one unit.

Table 23. Impact of one unit increase in final demand for respective goods and services on domestic production

•	Impact
	(units)
Rice, processed	3.043
Pig	2.777
Paddy	2.630
Processed seafood and by products	2.607
Processed, preserved meat	2.559
Tea, processed	2.503
Sugar, refined	2.496
Irrigation service	2.494
Fish - Farming	2.459
State management, defence and compulsory social security	2.445
Association	2.417
Coffee, processed	2.376
Cow	2.374
Sugarcane	2.327
Products of printing activities	2.304
Animal feeds	2.298
Poultry	2.285
Bricks, tiles	2.266

Ciment	2.220
Civil construction	2.194
Tea	2.184
Metallic ore	2.179
Stone	2.175
Trade	2.162
Veterinary	2.161
Non-alcohol water and soft drinks	2.156
Water	2.134
Products of publising house	2.131
Fishery	2.107
Cakes, jams, candy, coca, chocolate products	2.102
Coal	2.097
Coffe beans	2.091
Education and training	2.056
Cude oil, natural gas	2.054
Concrete, mortar and other cement products	2.053
Motor vehicles, motor biles and spare parts	2.011
Beer and liquors	1.994
Ceramis and by products	1.976
Electricity, gas	1.960
Processed and preserved fuits and vegetables	1.949
Restaurants	1.948
Real estale	1.938
Leather goods	1.935
Lottery	1.905
Ready -made clother, sheets	1.896
Science and technology	1.889
Real estate business and consultancy services	1.876
Health care, social relief	1.846
Soap, detergents	1.828
Processed wood and wood products	1.807
Air transport services	1.745
Forestry	1.703
Pesticides	1.635
Milk, butter and other dairy products	1.616
Communication services	1.609

Processed rubber and by products	1.572
Perfumes and other toilet preparation	1.562
Weaving and embroidery of textile -based goods	1.542
Raw rubber	1.517
Bicycles and spare parts	1.508
Water transport services	1.499
Hotels	1.429
Glass and glass products	1.417
Home appliances and its spare parts	1.389
Sand, Gravel	1.371
Alcohol, beer and liquors	1.356
Cigarettes and othertobacco products	1.341
Road Transportation	1.308
Paper pulpand paper products and by products	1.211
Fertilizer	1.200
Repair of small transport means, motorbikes and personal household appliances	1.183
Tourism	1.158
Banking, credit, treasury	1.157
Culture and sport	1.142
Chemical fertilizer	1.039
Paint	1.025
Health medicine	0.997
Health instrument and apparatus	0.992
Automobiles	0.920
Ferrous matals and products (except machinery equipment)	0.915
Weaving of cloths (all kinds)	0.891
Processed vegetable, and amimals oils and fats	0.870
Railway transport services	0.839
Insurance	0.795
Basic organix chemicals	0.787
Fibers, thread	0.760
Carpets	0.749
Gasoline, lubricants (already refined)	0.741

Machinery used for broadcasting, television and information activities	0.710
Basic inorganix chemicals	0.649
Non-ferrous metals and products(except machinery equipment)	0.595
General -purpose machinery	0.582
Electrical machinery	0.540
Products of leather tanneries	0.487
Plastic (including semi-plastic products)	0.446
Inl, varnish and other painting materials	0.331
Precise and optics equipment, meter	0.213

The agriculture and fishery goods have strong impacts on labour incomes, meanwhile the manufacturing goods have weak impacts. An increase in final demand for agriculture and fishery goods have significant impact on the labour incomes. Table 24 shows that an one unit increase in final demand for agriculture and fishery goods would increase the labour income by 0.7 - 0.9 units. Additionally, more activities of public administration, education and training also express great impact on labour incomes. Noticeably, the goods and services have weakest impacts on labour incomes are mainly chemicals, machineries and even the labour intensive goods such as garments with the impacts of less than 0.2 units.

Table 24. Impact of one unit increase in final demand for respective goods and services on labour income

	Impact (units)
	<u> </u>
Fish - Farming	0.927
Association	0.901
Irrigation service	0.883
State management, defence and compulsory social security	0.872
Paddy	0.846
Education and training	0.801
Sugarcane	0.801
Pig	0.770
Rice, processed	0.743
Poultry	0.677
Health care, social relief	0.672

Coffee, processed	0.639
Processed, preserved meat	0.629
Coal	0.619
Water	0.617
Tea	0.617
Cow	0.613
Coffe beans	0.608
Tea, processed	0.606
Real estate business and consultancy services	0.587
Veterinary	0.585
Science and technology	0.582
Electricity, gas	0.582
Cude oil, natural gas	0.578
Fishery	0.574
Processed seafood and by products	0.574
Sugar, refined	0.569
Metallic ore	0.564
Trade	0.560
Lottery	0.559
Animal feeds	0.553
Forestry	
Restaurants	0.536 0.526
Beer and liquors	0.524
Real estale	
Processed and preserved fuits and vegetables	0.494
Communication services	0.489
	0.471
Products of publising house Non-alcohol water and soft drinks	0.469
	0.462
Products of printing activities  Stone	0.460
210112	0.456
Concrete, mortar and other cement products	0.448
Bricks, tiles  Civil construction	0.446
Civil construction	0.445
Cakes, jams, candy, coca, chocolate products	0.433
Ciment	0.420
Pesticides	0.416
Banking, credit, treasury	0.395
Processed wood and wood products	0.394
Ceramis and by products	0.388
Soap, detergents	0.385
Water transport services	0.385
Motor vehicles, motor biles and spare parts	0.384
Road Transportation	0.383

Culture and sport	0.363
Air transport services	0.355
Processed rubber and by products	0.353
Hotels	0.353
Glass and glass products	0.340
Perfumes and other toilet preparation	0.336
Repair of small transport means, motorbikes and personal household	0.550
appliances	0.331
Milk, butter and other dairy products	0.328
Sand, Gravel	0.324
Alcohol, beer and liquors	0.319
Cigarettes and othertobacco products	0.319
Fertilizer	0.296
Tourism	0.292
Railway transport services	0.290
Raw rubber	0.281
Home appliances and its spare parts	0.281
Ready -made clother, sheets	0.276
Leather goods	0.270
Weaving and embroidery of textile -based goods	0.265
Bicycles and spare parts	0.255
Health instrument and apparatus	0.246
Health medicine	0.238
Paper pulpand paper products and by products	0.226
Chemical fertilizer	0.224
Automobiles	0.223
Processed vegetable, and amimals oils and fats	0.215
Paint	0.204
Insurance	0.200
Gasoline, lubricants (already refined)	0.194
Ferrous matals and products (except machinery equipment)	0.185
Weaving of cloths (all kinds)	0.163
Basic organix chemicals	0.153
Basic inorganix chemicals	0.153
Fibers, thread	0.142
Carpets	0.141
Products of leather tanneries	0.114
Machinery used for broadcasting, television and information activities	0.112
General -purpose machinery	0.111
Non-ferrous metals and products (except machinery equipment)	0.097
Electrical machinery	0.093
Plastic (including semi-plastic products)	0.081
Inl, varnish and other painting materials	0.075

The mining goods and infrastructure utilities have largest impact on capital income, meanwhile the goods having weakest impacts are the manufacturing ones. Increases in demand for oil, electricity, water and telecommunication, real estates have the strongest impacts on capital incomes with the income increases by 0.4 - 0.6 units. The goods and services having smallest impacts on capital incomes remain the manufacturing, about 0.01 units. (see Table 25)

Table 25. Impact of one unit increase in final demand for respective goods and services on capital income

•	Impact (units)
	_
Cude oil, natural gas	0.594
Electricity, gas	0.487
Water	0.482
Communication services	0.458
Lottery	0.438
Real estale	0.423
Raw rubber	0.395
Trade	0.382
Fish - Farming	0.380
Coal	0.379
Bricks, tiles	0.376
Tea, processed	0.371
Real estate business and consultancy services	0.365
Products of publising house	0.353
Restaurants	0.351
Cow	0.350
Coffee, processed	0.348
Stone	0.347
Coffe beans	0.346
Irrigation service	0.344
Sugar, refined	0.344
Processed seafood and by products	0.339
Metallic ore	0.338
Veterinary	0.337
Civil construction	0.337
Tea	0.334

Fishery	0.334
Ciment	0.328
Products of printing activities	0.320
Pig	0.316
Processed, preserved meat	0.302
Processed and preserved fuits and vegetables	0.301
Water transport services	0.300
Hotels	0.297
Rice, processed	0.293
Forestry	0.293
Cakes, jams, candy, coca, chocolate products	0.291
Science and technology	0.291
Animal feeds	0.290
Concrete, mortar and other cement products	0.289
Pesticides	0.289
Poultry	0.287
Education and training	0.286
Road Transportation	0.286
Ceramis and by products	0.286
Air transport services	0.285
Beer and liquors	0.284
State management, defence and compulsory social security	0.284
Non-alcohol water and soft drinks	0.284
Processed wood and wood products	0.282
Association	0.281
Sugarcane	0.268
Health care, social relief	0.265
Sand, Gravel	0.265
Banking, credit, treasury	0.264
Paddy	0.264
Motor vehicles, motor biles and spare parts	0.249
Processed rubber and by products	0.240
Tourism	0.238
Ready -made clother, sheets	0.226
Perfumes and other toilet preparation	0.222
Home appliances and its spare parts	0.216
Milk, butter and other dairy products	0.213
Glass and glass products	0.213
Weaving and embroidery of textile -based goods	0.209
Leather goods	0.207
Alcohol, beer and liquors	0.205
Fertilizer	0.204
Soap, detergents	0.203

Chemical fertilizer	0.187
Culture and sport	0.178
Processed vegetable, and amimals oils and fats	0.171
Paper pulpand paper products and by products	0.169
Cigarettes and othertobacco products	0.168
Health instrument and apparatus	0.167
Repair of small transport means, motorbikes and personal household	
appliances	0.166
Insurance	0.166
Railway transport services	0.164
Automobiles	0.159
Health medicine	0.145
Paint	0.136
Gasoline, lubricants (already refined)	0.132
Bicycles and spare parts	0.124
Ferrous matals and products (except machinery equipment)	0.122
Fibers, thread	0.119
Basic organix chemicals	0.117
Weaving of cloths (all kinds)	0.111
Basic inorganix chemicals	0.106
Carpets	0.100
Electrical machinery	0.094
Machinery used for broadcasting, television and information activities	0.082
General -purpose machinery	0.078
Plastic (including semi-plastic products)	0.070
Non-ferrous metals and products(except machinery equipment)	0.069
Inl, varnish and other painting materials	0.056
Products of leather tanneries	0.051
Precise and optics equipment, meter	0.035

The agriculture goods expressed the largest impacts on household income, while the mining products have strongest impacts on enterprise incomes and manufacturing products have smallest impact on both household and enterprises incomes..

Table 26. Impact of one unit increase in final demand for respective goods and services on household income

	Impact (units)
Paddy	1.256

Fish - Farming	1 154
Sugarcane	1.154
Pig	1.129 1.110
Irrigation service	1.110
Rice, processed	1.079
Association	1.068
State management, defence and compulsory social security	1.044
Poultry	1.009
Education and training	0.971
Tea	0.911
Cow	
Coffe beans	0.896
Cude oil, natural gas	0.892
Water	0.889
Tea, processed	0.876
Coffee, processed	0.857
Processed, preserved meat	0.856
•	0.854
Electricity, gas Coal	0.839
	0.828
Health care, social relief	0.827
Sugar, refined	0.816
Lottery  Real actate business and consultancy convices	0.791
Real estate business and consultancy services	0.785
Processed seafood and by products	0.779
Veterinary	0.771
Trade	0.767
Fishery	0.763
Animal feeds	0.762
Metallic ore	0.750
Science and technology	0.743
Forestry	0.734
Restaurants	0.726
Real estale	0.718
Communication services	0.711
Beer and liquors	0.705
Processed and preserved fuits and vegetables	0.690
Products of publising house	0.660
Bricks, tiles	0.647
Stone	0.643
Products of printing activities	0.636
Non-alcohol water and soft drinks	0.634
Raw rubber	0.630
Civil construction	0.627

Cakes, jams, candy, coca, chocolate products	0.617
Concrete, mortar and other cement products	0.607
Ciment	0.596
Pesticides	0.573
Processed wood and wood products	0.559
Water transport services	0.545
Ceramis and by products	0.543
Banking, credit, treasury	0.537
Road Transportation	0.536
Motor vehicles, motor biles and spare parts	0.519
Hotels	0.511
Air transport services	0.508
Soap, detergents	0.500
Processed rubber and by products	0.492
Sand, Gravel	0.466
Culture and sport	0.464
Perfumes and other toilet preparation	0.458
Glass and glass products	0.457
Milk, butter and other dairy products	0.450
Alcohol, beer and liquors	0.439
Repair of small transport means, motorbikes and personal household	
appliances	0.424
Tourism	0.420
Cigarettes and othertobacco products	0.420
Fertilizer	0.408
Ready -made clother, sheets	0.398
Home appliances and its spare parts	0.397
Leather goods	0.383
Railway transport services	0.381
Weaving and embroidery of textile -based goods	0.379
Health instrument and apparatus	0.338
Bicycles and spare parts	0.325
Chemical fertilizer	0.324
Paper pulpand paper products and by products	0.318
Health medicine	0.318
Processed vegetable, and amimals oils and fats	0.314
Automobiles	0.311
Insurance	0.287
Paint	0.278
Gasoline, lubricants (already refined)	0.265
Ferrous matals and products (except machinery equipment)	0.252
Weaving of cloths (all kinds)	0.225
Basic organix chemicals	0.216

Basic inorganix chemicals	0.211
Fibers, thread	0.208
Carpets	0.195
Machinery used for broadcasting, television and information activities	0.156
General -purpose machinery	0.153
Products of leather tanneries	0.144
Electrical machinery	0.142
Non-ferrous metals and products(except machinery equipment)	0.135
Plastic (including semi-plastic products)	0.119
Inl, varnish and other painting materials	0.105
Precise and optics equipment, meter	0.064

Table 27. Impact of one unit increase in final demand for respective goods and services on enterprise income

	Impact (units)
Cude oil, natural gas	0.567
Electricity, gas	0.465
Water	0.461
Communication services	0.437
Lottery	0.418
Real estale	0.404
Raw rubber	0.378
Trade	0.365
Fish - Farming	0.363
Coal	0.362
Bricks, tiles	0.360
Tea, processed	0.354
Real estate business and consultancy services	0.348
Products of publising house	0.338
Restaurants	0.336
Cow	0.335
Coffee, processed	0.333
Stone	0.331
Coffe beans	0.331
Irrigation service	0.329
Sugar, refined	0.328
Processed seafood and by products	0.324

Metallic ore	0.323
Veterinary	0.323
Civil construction	0.322
Tea	0.322
Fishery	0.319
Ciment	0.319
Products of printing activities	0.314
Pig	0.300
Processed, preserved meat	0.302
Processed and preserved fuits and vegetables	0.288
Water transport services	0.286
Hotels	
Rice, processed	0.283
Forestry	0.280 0.280
Cakes, jams, candy, coca, chocolate products	
Science and technology	0.278
Animal feeds	0.278
	0.277
Concrete, mortar and other cement products Pesticides	0.277
	0.276
Poultry	0.274
Education and training	0.274
Road Transportation	0.273
Ceramis and by products	0.273
Air transport services	0.272
Beer and liquors	0.272
State management, defence and compulsory social security	0.271
Non-alcohol water and soft drinks	0.271
Processed wood and wood products	0.270
Association	0.268
Sugarcane	0.256
Health care, social relief	0.254
Sand, Gravel	0.253
Banking, credit, treasury	0.253
Paddy	0.252
Motor vehicles, motor biles and spare parts	0.237
Processed rubber and by products	0.229
Tourism	0.227
Ready -made clother, sheets	0.216
Perfumes and other toilet preparation	0.212
Home appliances and its spare parts	0.206
Milk, butter and other dairy products	0.203
Glass and glass products	0.203
Weaving and embroidery of textile -based goods	0.200

Leather goods	0.198
Alcohol, beer and liquors	0.196
Fertilizer	0.195
Soap, detergents	0.194
Chemical fertilizer	0.178
Culture and sport	0.170
Processed vegetable, and amimals oils and fats	0.163
Paper pulpand paper productsand by products	0.162
Cigarettes and othertobacco products	0.160
Health instrument and apparatus	0.160
Repair of small transport means, motorbikes and personal household	
appliances	0.159
Insurance	0.158
Railway transport services	0.157
Automobiles	0.152
Health medicine	0.138
Paint	0.130
Gasoline, lubricants (already refined)	0.126
Bicycles and spare parts	0.118
Ferrous matals and products (except machinery equipment)	0.117
Fibers, thread	0.114
Basic organix chemicals	0.112
Weaving of cloths (all kinds)	0.106
Basic inorganix chemicals	0.101
Carpets	0.095
Electrical machinery	0.090
Machinery used for broadcasting, television and information activities	0.078
General -purpose machinery	0.074
Plastic (including semi-plastic products)	0.067
Non-ferrous metals and products(except machinery equipment)	0.066
Inl, varnish and other painting materials	0.053
Products of leather tanneries	0.049
Precise and optics equipment, meter	0.034

The increase in demand for services have strongest impacts on urban households, while the increases in demand for agriculture goods provide the largest impacts on rural households.

Table 28. Impact of one unit increase in final demand for respective goods and services on urban household income

di ban nouschold income	Impact (units)
Association	0.621
State management, defence and compulsory social security	0.479
Electricity, gas	0.462
Lottery	0.457
Real estate business and consultancy services	0.454
Cude oil, natural gas	0.443
Education and training	0.443
Water	0.436
Science and technology	0.434
Communication services	0.404
Real estale	0.397
Coal	0.393
Trade	0.390
Restaurants	0.388
Health care, social relief	0.376
Coffee, processed	0.366
Veterinary	0.360
Metallic ore	0.354
Tea, processed	0.333
Processed, preserved meat	0.318
Bricks, tiles	0.315
Banking, credit, treasury	0.314
Products of publising house	0.312
Beer and liquors	0.306
Water transport services	0.304
Stone	0.301
Road Transportation	0.300
Civil construction	0.297
Ciment	0.295
Products of printing activities	0.291
Sugar, refined	0.287
Concrete, mortar and other cement products	0.287
Rice, processed	0.286
Hotels	0.285
Pesticides	0.284
Fish - Farming	0.279
Air transport services	0.276
Non-alcohol water and soft drinks	0.273

Irrigation service	0.272
Processed and preserved fuits and vegetables	0.272
Tea	0.263
Processed seafood and by products	0.262
Ceramis and by products	0.259
Cakes, jams, candy, coca, chocolate products	0.258
Pig	0.255
Motor vehicles, motor biles and spare parts	0.253
Paddy	0.247
Cow	0.243
Coffe beans	0.241
Repair of small transport means, motorbikes and personal household	
appliances	0.241
Poultry	0.239
Sugarcane	0.239
Tourism	0.237
Animal feeds	0.235
Fishery	0.234
Processed wood and wood products	0.225
Sand, Gravel	0.224
Soap, detergents	0.223
Processed rubber and by products	0.223
Forestry	0.221
Culture and sport	0.218
Glass and glass products	0.216
Railway transport services	0.216
Alcohol, beer and liquors	0.209
Raw rubber	0.209
Perfumes and other toilet preparation	0.206
Ready -made clother, sheets	0.201
Fertilizer	0.199
Leather goods	0.196
Weaving and embroidery of textile -based goods	0.192
Milk, butter and other dairy products	0.192
Home appliances and its spare parts	0.188
Cigarettes and othertobacco products	0.181
Insurance	0.164
Health instrument and apparatus	0.159
Chemical fertilizer	0.157
Automobiles	0.152
Paper pulpand paper products and by products	0.150
Health medicine	0.147
Bicycles and spare parts	0.145

Processed vegetable, and amimals oils and fats	0.138
Gasoline, lubricants (already refined)	0.138
Paint	0.128
Ferrous matals and products (except machinery equipment)	0.123
Weaving of cloths (all kinds)	0.107
Fibers, thread	0.105
Basic organix chemicals	0.105
Carpets	0.101
Basic inorganix chemicals	0.100
Machinery used for broadcasting, television and information activities	0.092
Electrical machinery	0.080
Products of leather tanneries	0.072
General -purpose machinery	0.072
Non-ferrous metals and products(except machinery equipment)	0.066
Plastic (including semi-plastic products)	0.058
Inl, varnish and other painting materials	0.049
Precise and optics equipment, meter	0.031

Table 29. Impact of one unit increase in final demand for respective goods and services on rural household income

	Impact
	(units)
Paddy	1.009
Sugarcane	0.891
Fish - Farming	0.875
Pig	0.855
Irrigation service	0.818
Rice, processed	0.793
Poultry	0.770
Cow	0.653
Coffe beans	0.651
Tea	0.648
State management, defence and compulsory social security	0.564
Processed, preserved meat	0.536
Fishery	0.529
Sugar, refined	0.529
Education and training	0.528
Animal feeds	0.526

Too managed	0.524
Tea, processed	0.524
Processed seafood and by products	0.517
Forestry Coffee processed	0.513
Coffee, processed	0.490
Health care, social relief Association	0.451
	0.448
Cude oil, natural gas	0.446
Water Coal	0.441
Raw rubber	0.435
	0.421
Processed and preserved fuits and vegetables	0.418
Veterinary	0.412
Beer and liquors	0.400
Metallic ore	0.396
Trade	0.377
Electricity, gas	0.377
Non-alcohol water and soft drinks	0.360
Cakes, jams, candy, coca, chocolate products	0.359
Products of publising house	0.348
Products of printing activities	0.345
Stone	0.343
Restaurants	0.338
Lottery	0.335
Processed wood and wood products	0.334
Bricks, tiles	0.332
Real estate business and consultancy services	0.331
Civil construction	0.330
Real estale	0.320
Concrete, mortar and other cement products	0.320
Science and technology	0.310
Communication services	0.306
Ciment	0.301
Pesticides	0.289
Ceramis and by products	0.284
Soap, detergents	0.277
Processed rubber and by products	0.269
Motor vehicles, motor biles and spare parts	0.267
Milk, butter and other dairy products	0.259
Perfumes and other toilet preparation	0.251
Culture and sport	0.246
Sand, Gravel	0.242
Water transport services	0.241
Glass and glass products	0.240

Cigarettes and othertobacco products	0.239
Road Transportation	0.236
Air transport services	0.232
Alcohol, beer and liquors	0.230
Hotels	0.226
Banking, credit, treasury	0.223
Fertilizer	0.209
Home appliances and its spare parts	0.209
Ready -made clother, sheets	0.197
Weaving and embroidery of textile -based goods	0.187
Leather goods	0.187
Tourism	0.183
Repair of small transport means, motorbikes and personal household	
appliances	0.183
Bicycles and spare parts	0.180
Health instrument and apparatus	0.179
Processed vegetable, and amimals oils and fats	0.176
Health medicine	0.171
Paper pulpand paper productsand by products	0.168
Chemical fertilizer	0.167
Railway transport services	0.165
Automobiles	0.159
Paint	0.150
Ferrous matals and products (except machinery equipment)	0.129
Gasoline, lubricants (already refined)	0.128
Insurance	0.123
Weaving of cloths (all kinds)	0.118
Basic organix chemicals	0.112
Basic inorganix chemicals	0.111
Fibers, thread	0.103
Carpets	0.095
General -purpose machinery	0.081
Products of leather tanneries	0.071
Non-ferrous metals and products(except machinery equipment)	0.069
Machinery used for broadcasting, television and information activities	0.064
Electrical machinery	0.063
Plastic (including semi-plastic products)	0.061
Inl, varnish and other painting materials	0.056
Precise and optics equipment, meter	0.033

## 7. Conclusions and suggestions for industrial restructure policies

The quantivative analyses in the paper indices the main sources for Vietnam's economic growth; particully the service sector, capital factor, the non-state sector and export demand. Furthermore, GDP structure changes positively but slowly with increasing share of manufacturing industries, but decreasing share of domestic economic sectors. Followings are main conclusions and suggested policies for industrial restructuring policies for Vietnam in coming years.

- □ From industrial views, the sources and economic structure of Vietnam is in comformity with the industrialization process, but only at early statge of this process; particularly, manufacturing industry is the largest sources of GDP growth, but the economy still replies largely on agriculture and simple services. It suggests that there are many rooms for industrial restructure policy in diretion to futher promoting manufacting industries.

  □ From economic ownership view, the nonstate sector is the main sources for GDP growth, but replies heavily on household business and therefore limit the ability to expansion of business scale and improve profestionality and mordernization of this sector. Therefore, it is crucial to develop the strong nonstate enterprises, becoming the largest sources for GDP growth.

  □ From aggregate demand perspective, Vietnam's GDP growth is more and more depend on export demand, but the level of dependence is too high as compared with other countries and make GDP growth being negatively impacted by adverse changes in the international markets. It is important to further strengthen export, but consider the domestic market as important as exports.
- □ Employment structure changes in line with industrialization process, but not satisfy the requirements for new jobs; industry and construction is the largest sources for new jobs but does not show clearly increasing tendency and simple services still paly the important role for new jobs. It is necessary to develop minufacturing industries to create increasing number of new jobs in order to not only mobilise new participants into the labour forces but also labour from agriculture and simple services.
- High import demand is envitable for the countries in the early industrialisation process, but the too high import repliance as compared with other countries in the region make the economy vulnerable to the adverse changes in prices of imported goods. It is important to

developing industries being competitive against imported goods in order to reduce the over repliance on import; simitanously, inported goods need to improve the competitiveness of domestic goods.
 The critical production inputs are mostly imported, therefore, the advese changes in the

- ☐ The critical production inputs are mostly imported, therefore, the advese changes in the international markets would spread widely and quickly through the economy. It suggests Developing the industries producing the critical inputs for wide range of economic acticities, and reducing the over repliance on importation.
- ☐ Intermediate consumption account for the largest portion of output value and increased over time; ratio of value added declined, leading the reduced labour compensation as well as enterprise incomes. It is crutial to *develop industries providing production inputs to reduce production costs*.
- A significant portion of goods and services have production costs being very sensitive to changes in prices of raw materials, flues and labour costs; some goods accountes for a large part of total intermediate costs of the economy as a whole. Therefore, it is necessary to develop efficiently these specific industries having important role as production inputs to the economy.
- ☐ Manufacturing industry is main sources for GDP growth, but they have small spread over impacts on supply of goods and services, domestic production, labour incomes. Enterprise profits, household income as compared with other industries. It is important to develop efficiently manufacturing and linkages between the manufacturing industries with other industries.