



UNITER



2016



BELARUSIAN ECONOMY

Analysis of the structure and investment prospects of
selected industries





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1. Overall structure of Belarusian economy

1.1. Structure division

An economy may be analyzed in terms of its component parts, often called 'sectors'. Sectors may be widely drawn to include groups of industries (e.g. the engineering industries) or narrowly drawn to identify parts of industries (e.g. wood processing industry). Depending on our purpose, **Belarusian economy** is going to be analyzed **within the following sectors**:

- Agriculture
- Fishing
- Mining industry
- Manufacturing industry
- Electricity, gas, water production and supply
- Construction
- Wholesale and retail trade; repair of vehicles, household goods
- Accommodation and restaurant activities
- Transportation and communications
- Financial activities
- Real estate activities and lease
- Education activities
- Health care
- Social work, personal and communal activities

Defined sectors fully reflect Belarusian statistics' methodology that enables us to operate with official statistical data. To maintain a clear overview, we also **divide manufacturing industry** into fourteen industry groups for the purposes of this study ("narrowly drawn approach"):

- *Food industry including manufacturing of beverages and tobacco products (hereinafter referred to as food industry)*
- *Textile industry including manufacturing of wearing apparel*
- *Manufacture of leather and related products, footwear industry*
- *Wood processing industry*
- *Manufacture of paper and paper products*
- *Manufacture of coke and refined oil products*
- *Chemical industry*
- *Manufacture of rubber and plastic products*
- *Manufacture of other non-metallic mineral products*
- *Metal industry (or metallurgy industry)*
- *Manufacture of machinery and equipment*
- *Manufacture of electrical, electronic and optical equipment*
- *Manufacture of motor vehicles and equipment*
- *Other manufacturing*

"Sector" and "industry" are going to be used as synonyms in this study.



1.2. Sector value added and performance

Industry's contribution to GDP is one of the most representative figures allowing to assess the size and overall performance of the industry.

The leading industry of Belarusian economy is **manufacturing** contributing **22.5%** of GDP in 2015. This figure seems to be quite stable in recent years. However, in 2011-2012 years the share of manufacturing industry reached up to 28%.

The second largest industry – **wholesale and retail trade; repair of vehicles, household goods** – accounted for around **12.1%** of GDP in 2014 having significantly decreased in recent years (15.3% in 2011).

The share of **construction sector** was increasing during the last seven years (except for 2011) from 8.6% in 2008 to **10.4%** in 2014.

The other large industries of Belarusian economy are real estate activities and lease (8.4%), transportation and communication (7.9%) and agriculture (7.7%).

Structure of GDP by industry in 2014

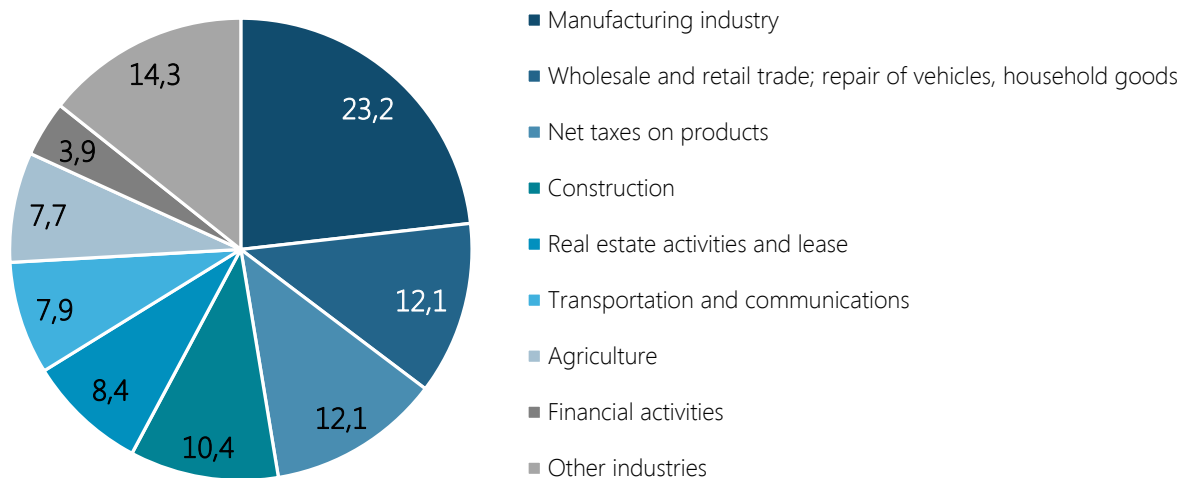


Table 1 Contribution to GDP by industry, %

	2011	2012	2013	2014	2015 (Preliminary data)
GDP	100%	100%	100%	100%	100%
including					
Agriculture	8,3%	8,5%	7,0%	7,7%	6,7%
Fishing	0,0%	0,1%	0,1%	0,1%	
Mining industry	1,1%	1,1%	1,0%	0,8%	0,7%
Manufacturing industry	28,1%	26,1%	23,1%	23,2%	22,4%
Electricity, gas, water production and supply	1,7%	2,9%	2,6%	2,9%	3,3%
Construction	6,6%	7,4%	10,2%	10,4%	8,3%
Wholesale and retail trade; repair of vehicles, household goods	15,3%	14,0%	12,9%	12,1%	12,5%
Accommodation and restaurant activities	0,7%	0,7%	0,9%	0,9%	
Transportation and communications	7,3%	7,5%	8,3%	7,9%	7,7%
Financial activities	4,8%	3,7%	3,6%	3,9%	
Real estate activities and lease	6,1%	6,0%	7,9%	8,4%	
Public administration	3,0%	3,0%	3,4%	3,4%	
Education activities	3,8%	3,9%	3,9%	3,8%	
Health care	2,4%	2,9%	3,0%	3,0%	
Social work, personal and communal activities	1,7%	1,9%	2,1%	1,9%	
Indirectly measured services of financial intermediation	-3,1%	-2,4%	-2,2%	-2,5%	
Net taxes on products	12,2%	12,7%	12,2%	12,1%	13,5%

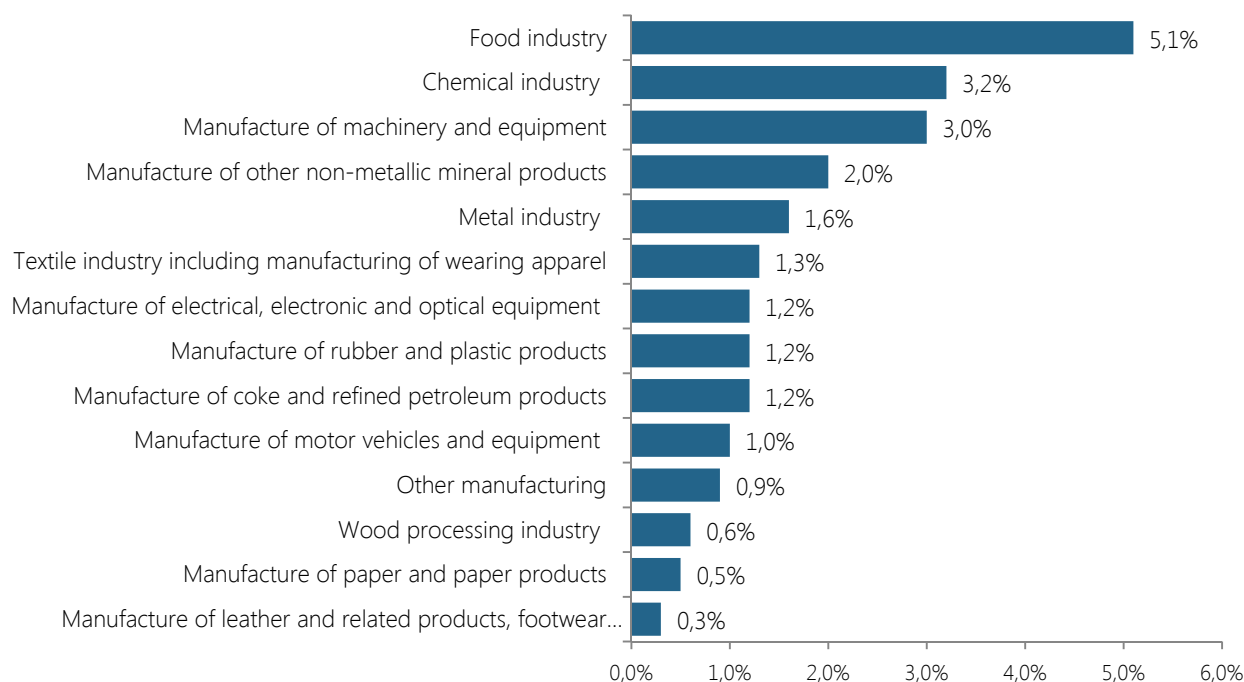
In manufacturing sector breakdown, the largest share accounts for **food industry – 5.1%**. The second place takes **chemical industry** contributing **3.2%** of gross domestic product. However, in 2011 chemical industry was the leading industry in manufacturing sector with the share of 6.4% of GDP. The third place goes to **manufacture of machinery and equipment** with GDP contribution of 3.0%.

In the range of **1%-2%** of GDP there are seven important industries such as:

- Manufacture of other non-metallic mineral products
- Metal industry
- Textile industry including manufacturing of wearing apparel
- Manufacture of electrical, electronic and optical equipment
- Manufacture of rubber and plastic products
- Manufacture of coke and refined oil products
- Manufacture of motor vehicles and equipment

Having considerable potential, wood processing industry is amounted only to **0.6%** of gross domestic product.

Share of selected industries in GDP in 2013



According to preliminary data¹, production volume of manufacturing industry (including mining) accounted for 44.8 billion dollars in 2015. It has significantly dropped by 31% in value terms in comparison with 2014 (mostly due to devaluation of Belarusian ruble). In manufacturing industry breakdown, production volumes have declined across all sectors in 2015.

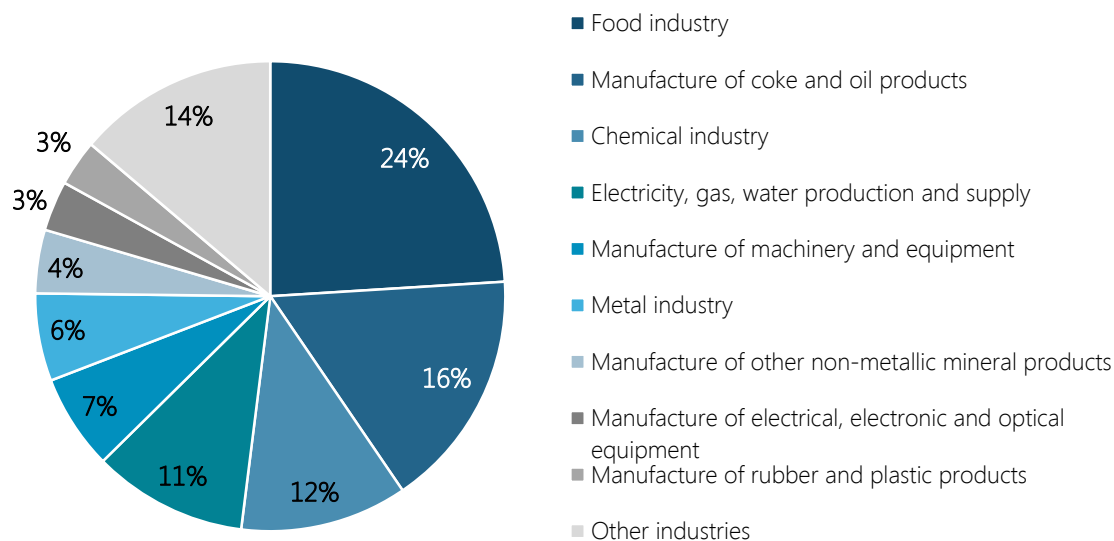
24% of overall production volumes accounted for **food industry** in 2015. In terms of production volumes, **manufacture of refined oil products** took **the second place** with 7.4 billion dollars production volume whereas in terms of contribution to GDP it took only the ninth place.

Chemical industry has produced products at the total amount of 5.1 billion dollars and took 12% of production volumes.

Significant production volumes are also overseen in such industries as electricity, gas, water production and supply (4.7 billion dollars), manufacture of machinery and equipment (2.9 billion dollars), metal industry (2.7 billion dollars).

¹ Preliminary data on production volumes does not include micro enterprises.

Structure of production volume by industry in 2015

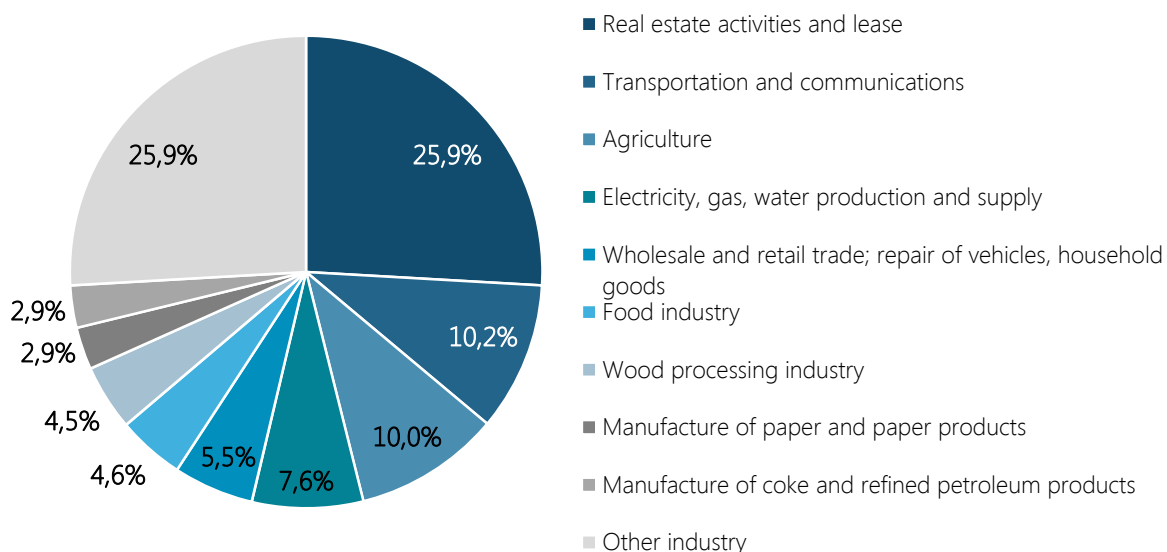


TOP-3 industries in terms of capital investments are real estate activities and lease (25.9%), transportation and communication (10.2%) and agriculture (10.0%). All together they accounted for more than 45% of all capital investment in the economy.

The share of large producing industries such as food industry, manufacture of refined oil products, chemical industry (all together amounted to 52% of production volumes) in capital investment structure accounts for 2.7%-4.6%.

The lowest volume of capital investment amounts to fishing; manufacture of leather and related products, footwear industry; manufacture of electrical, electronic and optical equipment (less than 1%).

Structure of capital investments by industry in 2014



Taking into consideration **revenues** generating by each industry, **the first place** goes to **wholesale and retail trade**. It generates about 36.2% of all revenues (69.1 billion dollars) and has improved its share from 35.1% in 2011 by 1.1 p.p.

Food industry also shows growth of revenues in recent years. Its share has increased by 1.9 p.p. and reached **8.7%** in total structure (16.5 billion dollars). While the contribution into GDP of **electricity, gas, water production and supply sector** is around 3%, it generates **6.6%** of total revenues.

Table 2 Enterprises' revenues by industry, million dollars

	2011	2012	2013	2014
Revenues, total	100%	100%	100%	100%
including				
Agriculture	3,7%	4,4%	4,4%	4,9%
Fishing	0,0%	0,0%	0,0%	0,0%
Mining industry	2,0%	2,2%	1,6%	1,6%
Manufacturing industry	34,8%	35,0%	33,0%	30,7%
including:				
Food industry	6,8%	7,6%	8,5%	8,7%
Textile industry including manufacturing of wearing apparel	1,1%	1,1%	1,1%	1,0%
Manufacture of leather and related products, footwear industry	0,3%	0,3%	0,3%	0,3%
Wood processing industry	0,5%	0,5%	0,5%	0,6%
Manufacture of paper and paper products	0,7%	0,7%	0,7%	0,6%
Manufacture of coke and oil products	4,8%	6,0%	4,7%	4,2%
Chemical industry	5,8%	4,5%	3,2%	3,4%
Manufacture of rubber and plastic products	1,5%	1,5%	1,4%	1,3%
Manufacture of other non-metallic mineral products	1,5%	1,6%	1,7%	1,4%
Metal industry	2,6%	2,5%	2,5%	2,2%
Manufacture of machinery and equipment	3,4%	4,2%	3,8%	3,0%
Manufacture of electrical, electronic and optical equipment	1,5%	1,5%	1,5%	1,4%
Manufacture of motor vehicles and equipment	2,4%	1,9%	1,7%	1,4%
Other manufacturing	1,1%	1,2%	1,3%	1,2%
Electricity, gas, water production and supply	7,3%	6,9%	6,7%	6,6%
Construction	5,3%	5,4%	6,7%	6,5%
Wholesale and retail trade; repair of vehicles, household goods	35,1%	34,7%	35,1%	36,2%
Accommodation and restaurant activities	0,4%	0,4%	0,5%	0,6%
Transportation and communications	7,2%	7,3%	7,4%	7,7%
Financial activities	0,7%	0,3%	0,2%	0,2%
Real estate activities and lease	2,8%	2,7%	3,4%	3,8%
Education activities	0,1%	0,1%	0,1%	0,1%
Health care	0,1%	0,2%	0,2%	0,2%
Social work, personal and communal activities	0,5%	0,6%	0,7%	0,8%

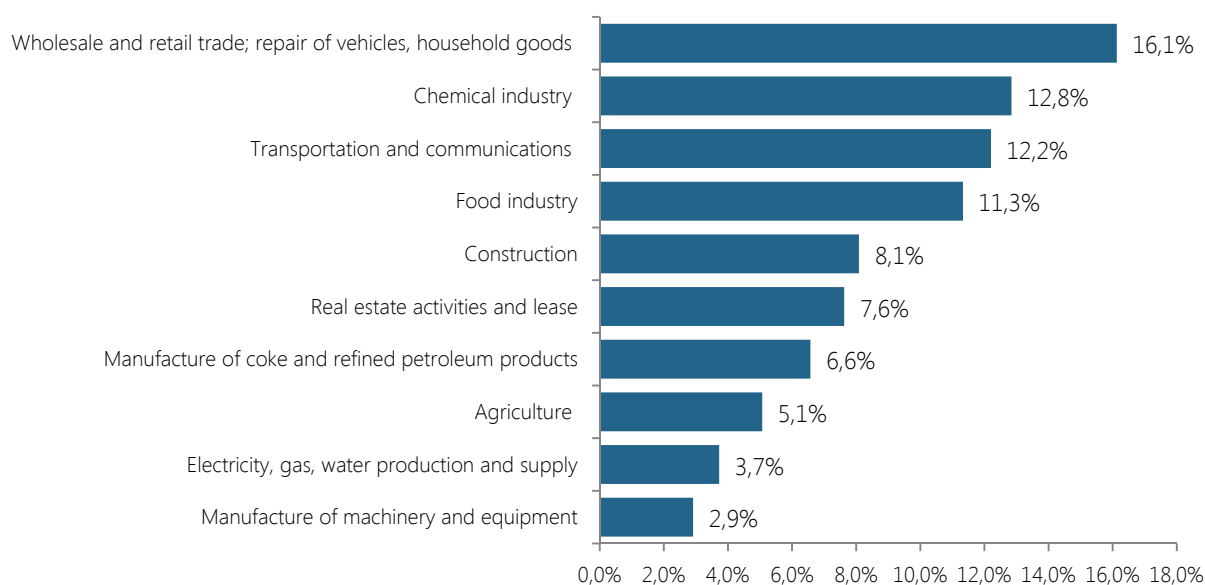
Other industries of manufacturing sector with high share of revenues include manufacture of coke and oil products (4.2%) and manufacture of machinery and equipment (3.0%).

Manufacturing sector together contributing the largest share into GDP generates about **58.5 billion dollars** or 30.7%. However, the share of manufacturing industry in total revenues of enterprises has dropped by 4.1 p.p. in recent years.

The **largest amount** of net profit as well as revenue is concentrated in **wholesale and retail trade industry**. This industry generates 16.1% (or 1.8 billion dollars) of total net profit across all sectors. High amounts of net profit are also concentrated in **chemistry industry (12.8%), transportation and communication (12.2%) and food industry (11.3%)**.

The following industries have the lowest amounts of net profit in comparison with other industries: wood processing industry (0.2% or 19.7 million dollars), accommodation and restaurants (0.2% or 26 million dollars), manufacture of paper and paper products (0.4% or 44.6 million dollars).

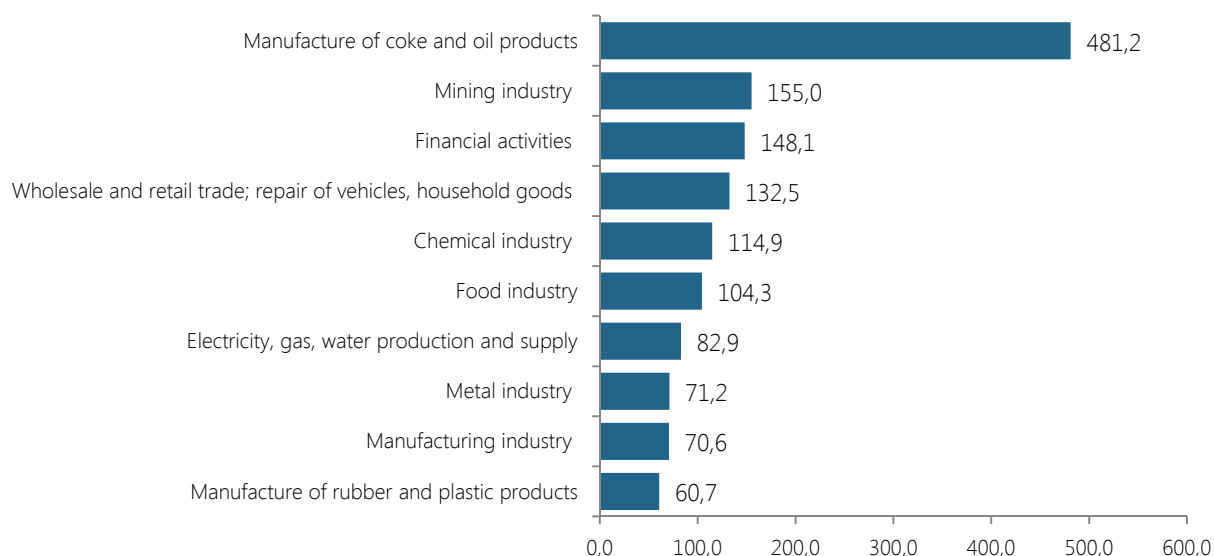
TOP-10 industries with highest share in total net profit , 2014



The most widely used measure of a country's economic efficiency is labor productivity and this is often defined as revenue (or output) per person employed. **Manufacture of coke and oil products** being the second largest industry by production volumes and hiring low number of employee has the **biggest revenue per employee** among others – **481.2 thou dollars per year**. Mining industry has also high labor productivity in the amount of 155 thou dollars per employee. Financial sector hires around 74.5 thou people (12.2 without banks) and have labor productivity level at 148 thou dollars.

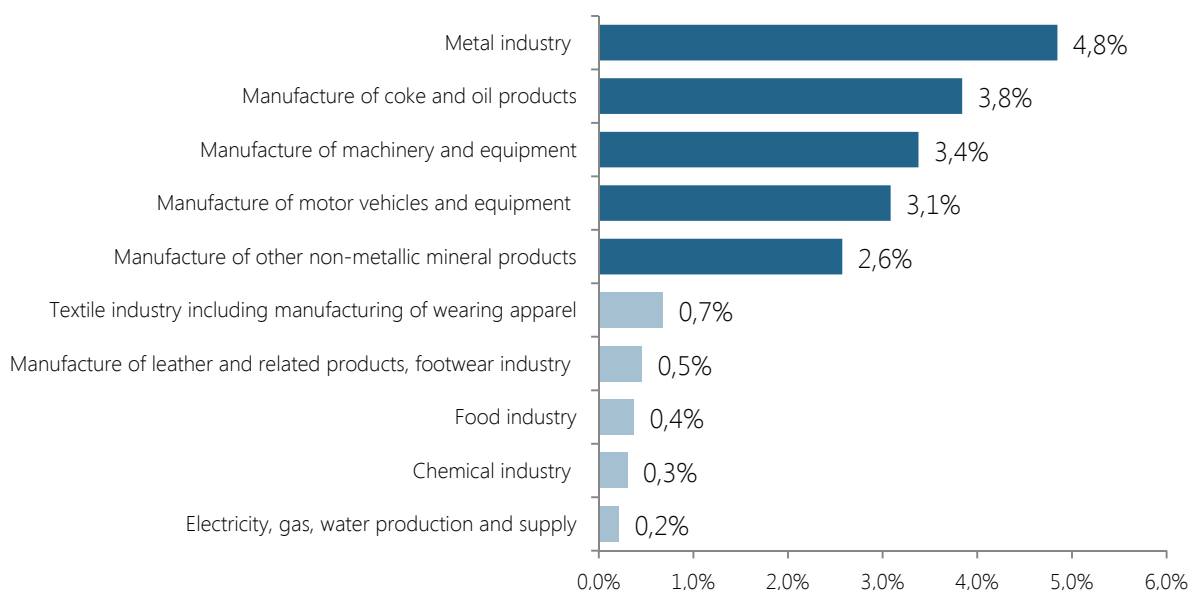
Labor productivity level in one of the most important sectors – **agriculture** – 24.45 thou dollars. There is a **great potential to increase** this level in Belarus,

Revenue per employee by industries, 2014, thou \$



To assess industry's innovation activities, we propose to consider the ratio of innovation expenditures² to revenue of specific industry. The **highest ratio** accounts for **metallurgy industry** (4.8%), **manufacture of coke and oil products** (3.8%) and **manufacture of machinery and equipment** (3.4%).

TOP-5 industries with the highest and lowest ratio of innovation expenditures to revenue

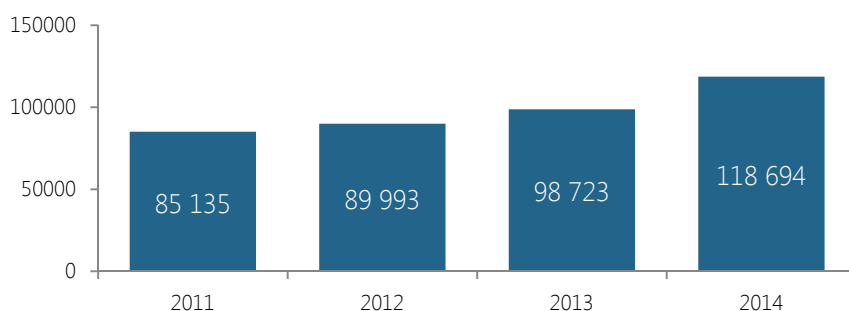


² Hereinafter, innovation expenditures includes expenditures on technological innovations, organizational and marketing innovations.

1.3. Small and medium enterprises

Total number of enterprises engaged in economic activity accounted for 118.6 thou at the end of 2014. Average growth rate of enterprises' number is around 12% annually. Basically, such high growth rate is explained by "birth boom" of micro enterprises: its number has increased by 51% in 2014 comparing to 2011.

Total number of enterprises in Belarus (at the end of the year)



Distribution of enterprises by size follows generally accepted classification taking into consideration the average number of employees during a calendar year, as follows:

- Micro enterprise – the average number of employees during a calendar year is less than 15 people, inclusive;
- Small enterprise - the average number of employees during a calendar year is from 16 to 100, inclusive;
- Medium enterprise - the average number of employees during a calendar year is from 100 to 250, inclusive;
- Large enterprise - the average number of employees during a calendar year is more than 251 employees.

Industries distribution on micro, small, medium and large enterprises would be based on the level of revenues generated by them.

All revenues in **manufacture of coke and oil products** industry are generated by **medium and large enterprises**.

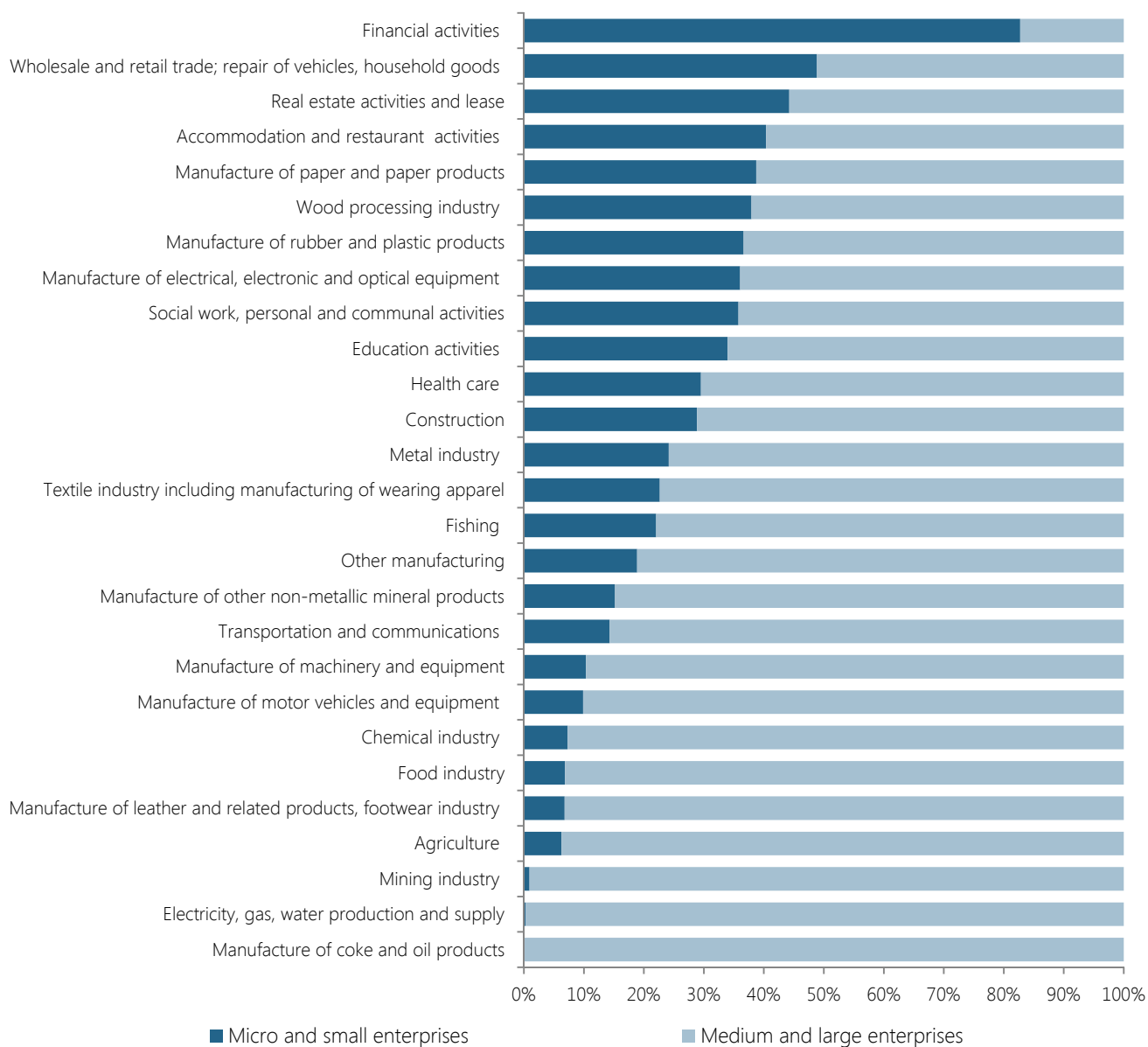
Traditionally, **medium and large enterprises** are concentrated in such sectors as the **electricity, gas and water production and supply (natural monopolies) and mining industry**: it is determined by economies of scale. Large and medium enterprises in electricity, gas and water production and supply sector generates almost all (99%) of industries' revenues (in terms of quantity, large enterprises accounts for more than 57% of all enterprises in this industry). There is the same situation in mining industry: large and medium enterprises accounts for 99% of all revenues.

Large and medium enterprises also play important role in the following industries (generate more than 90% of industries' revenues): **agriculture (93.7%), food industry (93.1%), chemical industry (93%), manufacture of motor vehicles and equipment (90%).**

More than 80% of revenues in financial sector accounts for micro and small enterprises.

Wholesale and retail being the second largest sector by number of employees is represented mostly by **micro and small** in quantity terms (97%). They also generate about 51% of all revenues in wholesale and retail sector.

Structure of enterprises by revenues, 2014

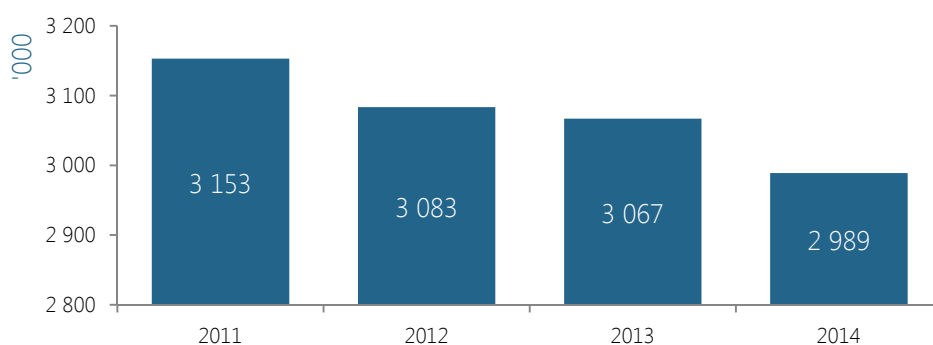


1.4. Sector social role

The average number of employees per year includes employees working under an employment agreement (contract) and performs permanent, temporary or seasonal works. This number also includes employees being on paid leave, not working due to temporary disability or other reasons. The average number of employees is given without employees being on maternity leave.

The average number of employees per year in Belarusian economy accounted for 2 988 thou employees. Ageing of population, increasing gap between the number of old and young population has led to decrease in average number of employees by 5.2% in comparison with 2011.

Average number of employees number of employees in Belarus

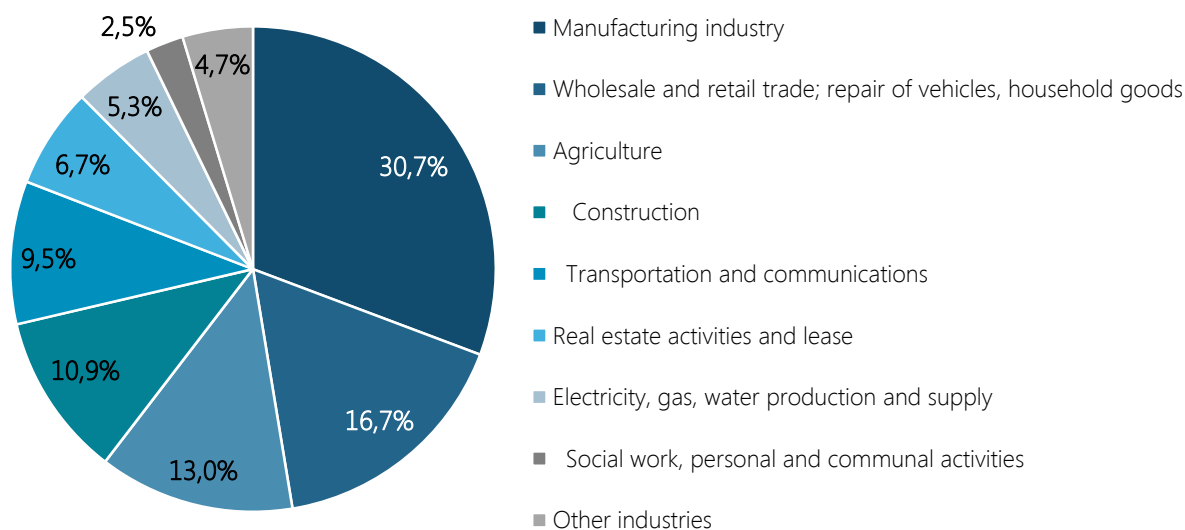


The three leading sectors of Belarusian economy in terms of value added employs the largest number of employees correspondingly. So, the largest employing industry is **manufacturing**. It employs more than **30%** of total average number of employees (918.6 thou employees). **The second largest** employing industry is **wholesale and retail trade, repair of vehicles, household goods**. The share of this industry in average number of employees accounts for 16.7% in 2014 (it increased by 2 p.p. in comparison with 2011). There are more than 388 thou people working in agriculture allowing it to take the third place in overall structure (13.0%).

The **other large industries** in terms of average number of employees are construction (10.9%), transportation and communication (9.5%), real estate activities and lease (6.7%).

Less than 1% of average number of employees is working in such industries as health care, mining, financial activities (without banks) and fishing.

Structure of average number of employees by industry in 2014

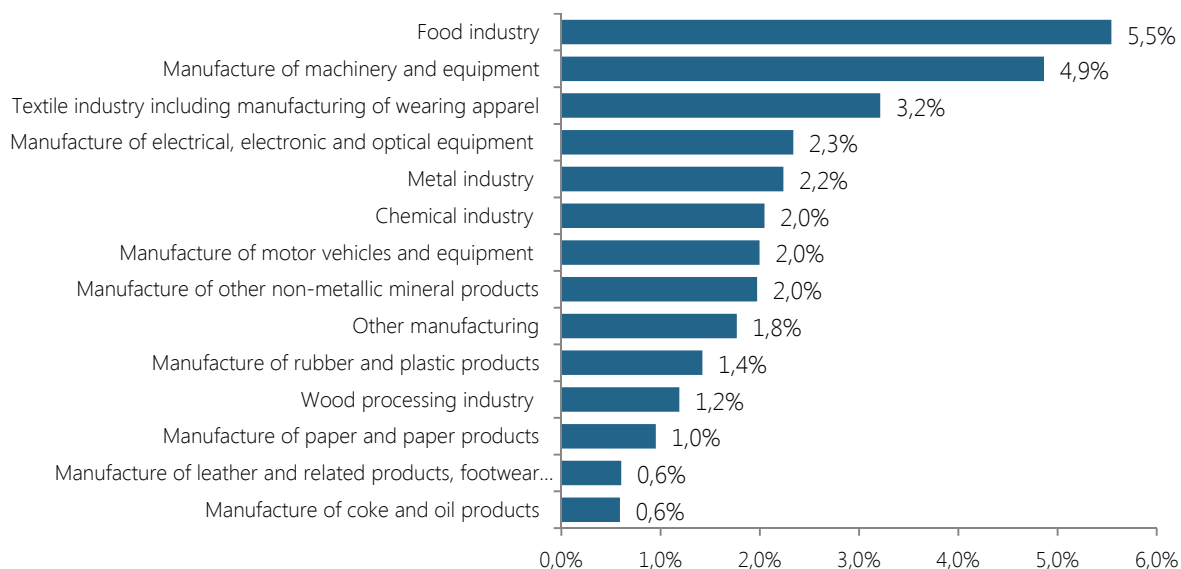


In terms of manufacturing industry, largest employing industry is **food industry**. The average number of people working in food industry accounted for 165.6 thou people (5.5% of total average number of employees). **4.9%** of employees working in **manufacture of machinery and equipment**.

There are an **extensive number of employees in textile industry** – 96 thou people. It employs 10.5% of all employees in manufacturing whereas its production volumes is relatively low and amounted only for 1.27 billion dollars (3.2% of manufacturing industry’s production volume).

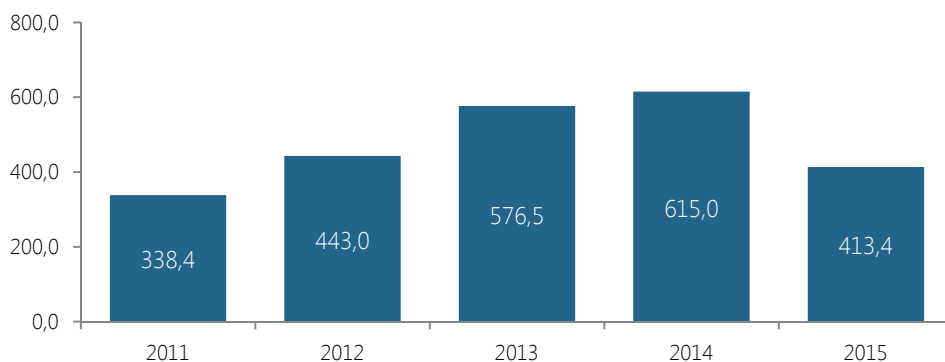
Having the second largest production volumes, **manufacture of coke and refined oil products** hires the **least number of employees** in comparison with other industries - 17.6 thou (or 0.6% of average number of employees in economy).

Share of selected industries in average number of employees in 2014



The average nominal wage in Belarus accounted for 413 dollars in January-December 2015. Due to devaluation of national currency it has dropped significantly (-33%) in comparison with 2014 in dollar terms (in Belarusian rubles it has increased by 6%).

Average nominal wage in Belarus, dollars



Devaluation of national currency in 2015 has seriously influenced the average nominal wages across all industries.

Being largest exporting industry in Belarus, **manufacture of coke and oil products** heads TOP industries with the **highest average nominal wages** in Belarus. Thus, the average nominal wages in abovementioned industry amounted to more than 767 dollars in January-December 2015. The decrease of wages in this sector accounted for around 280 dollars (27%).

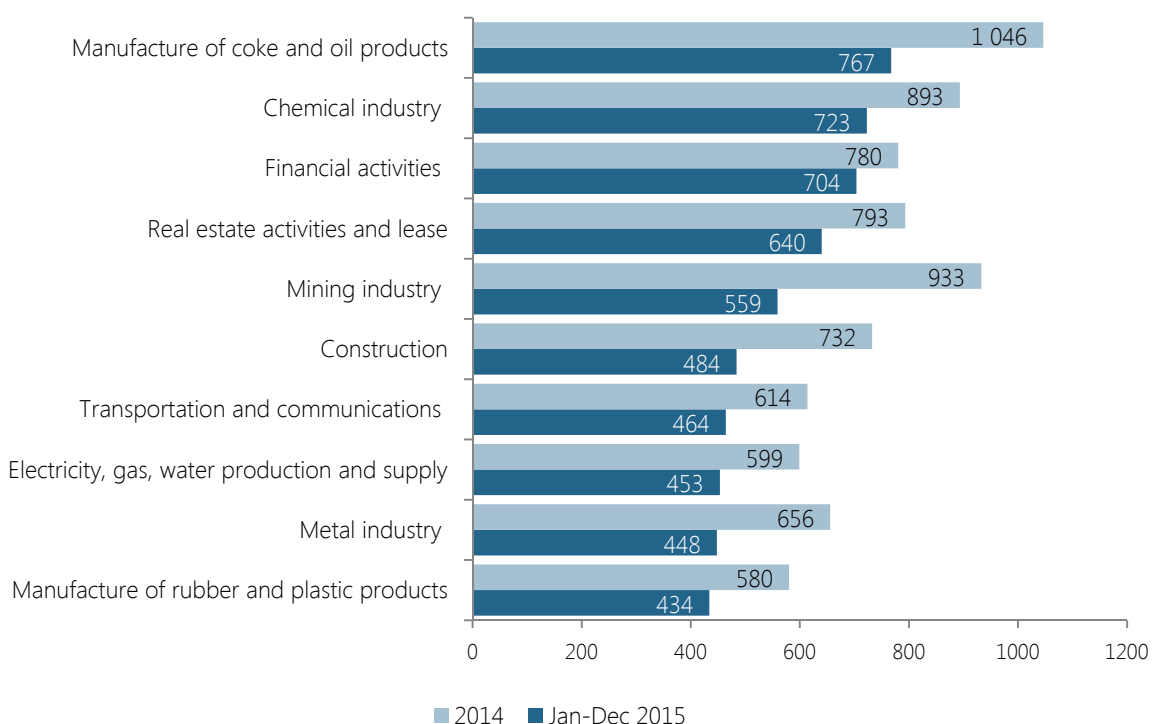
Chemical industry takes the second place with average nominal wage of 723 dollars in 2015. In comparison with 2014, the decrease of wages in this industry amounted for 19%.

Relatively high wages by contrast to average nominal wage in Belarus are overseen in such industries as financial activities (704\$), real estate and lease (640\$) and mining (559\$).

Quite low wages are typically accounted for non-production social industries such as education (297\$), social works, personal and communal services (329\$). Fishing industry and agriculture are also among the least attractive industries for employees in terms of wages.

The largest decline in wages accounted for mining and health care industries in 2015 (around 40%).

TOP 10 industries with the highest average wages, \$



The amount of taxes paid by the industry determines its role to the state budget. The **largest taxpayer**³ across all industries is **manufacturing sector**: it accounts for more than 34% of all taxes (or 6.7 billion dollars). **The second** largest taxpayer is **wholesale and retail industry**. The share of this industry in total sum of paid taxes is about 28-29%. Indeed, over the last three years its share has increased by 3.8 p.p.

In terms of manufacturing sector breakdown, the following three industries paid the largest amount of taxes in 2014: **food industry** (14.5%), **electricity, gas, water production and supply** (11.2%) and **manufacture of coke and oil products** (7.3%).

Table 3 Structure of taxes by industry, %

³ Hereinafter, the amount of taxes includes VAT and profit tax.



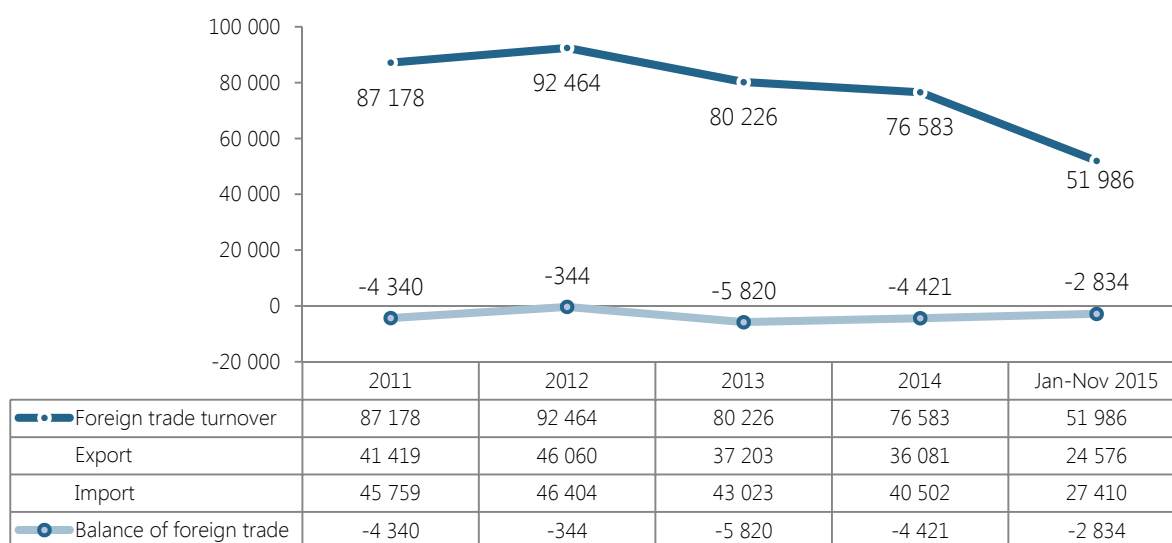
	2012	2013	2014
Taxes, total	100%	100%	100%
including:			
Agriculture	4,7%	4,6%	5,1%
Fishing	0,0%	0,0%	0,0%
Mining industry	6,3%	4,9%	4,8%
Manufacturing industry	36,4%	36,6%	34,1%
including:	0,0%	0,0%	0,0%
Food industry	11,6%	13,9%	14,5%
Textile industry including manufacturing of wearing apparel	0,8%	0,8%	0,7%
Manufacture of leather and related products, footwear industry	0,4%	0,3%	0,3%
Wood processing industry	0,3%	0,3%	0,3%
Manufacture of paper and paper products	0,6%	0,6%	0,5%
Manufacture of coke and oil products	6,1%	6,2%	7,3%
Chemical industry	5,6%	4,2%	1,9%
Manufacture of rubber and plastic products	0,8%	0,7%	0,7%
Manufacture of other non-metallic mineral products	1,9%	1,9%	1,6%
Metal industry	1,5%	1,5%	1,2%
Manufacture of machinery and equipment	3,3%	3,0%	2,3%
Manufacture of electrical, electronic and optical equipment	0,9%	0,9%	0,7%
Manufacture of motor vehicles and equipment	1,3%	1,2%	1,0%
Other manufacturing	1,2%	1,1%	1,1%
Electricity, gas, water production and supply	12,6%	12,6%	11,2%
Construction	5,7%	6,0%	5,8%
Wholesale and retail trade; repair of vehicles, household goods	24,8%	25,5%	28,6%
Accommodation and restaurant activities	0,3%	0,4%	0,4%
Transportation and communications	7,1%	7,1%	7,4%
Financial activities	0,0%	0,0%	0,0%
Real estate activities and lease	1,5%	2,0%	2,0%
Education activities	0,0%	0,0%	0,0%
Health care	0,0%	0,1%	0,1%
Social work, personal and communal activities	0,3%	0,4%	0,4%

1.5. Foreign trade⁴

Belarusian foreign trade being badly hit by economic crisis in 2009 exceeded the pre-crisis volumes of foreign trade turnover in 2011. A year after, there was a significant increase in exports volumes enabling Belarusian foreign trade turnover to **hit a record high of 92.46 billion dollars**. The Belarusian exports amounted to 46 billion dollars featuring thousands of goods. Exports growth was mostly due to significant increase of coke and oil products (by 14% yoy), which determined increase of their share in total exports up to 32.1%. Oil products growth in money terms was equally due to the growth of prices and physical volume, because of favorable prices in the world markets.

However, from 2013, external turnover as well as exports volumes started to decline. Macroeconomic turbulence, economic crisis on Russian market makes us to expect **further decrease** in exports volume in 2015. In January-November 2015, exports of goods decreased on 26.9%. In these circumstances, the balance of foreign trade of goods remains negative (-2.8 billion dollars in 2015), however this negative balance is offset by traditional surplus in trading in services (transports, software, construction services, etc).

Volume of foreign trade of goods in Belarus, mln dollars

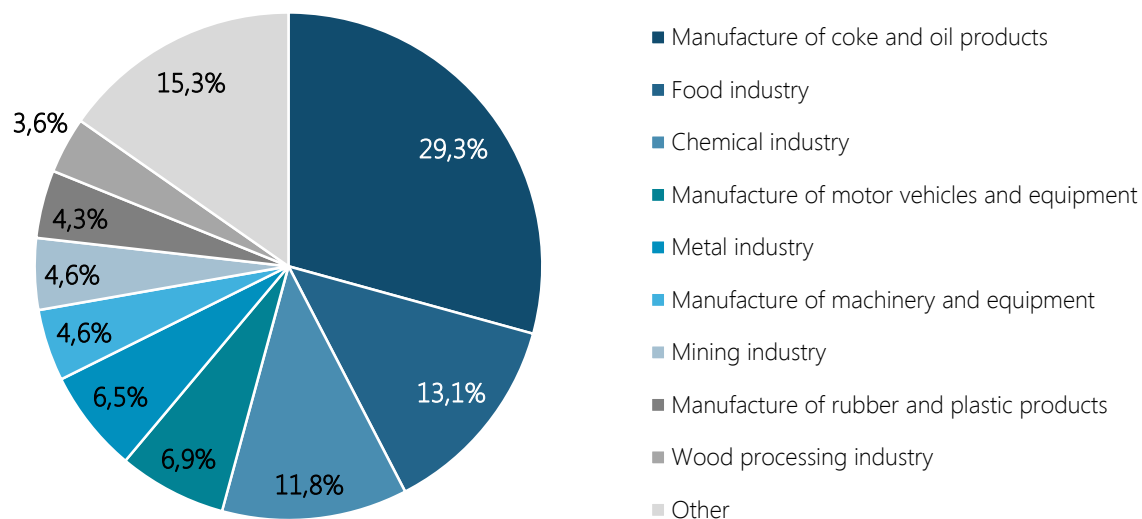


Manufacturing of coke and refined oil products accounts for almost **30%** of all Belarusian exports of goods. Food industry and chemical industry refer to the second and the third largest exporting sectors of Belarusian economy taking 13.1% and 11.8% of export, correspondingly. In terms of food industry, meat and dairy products are typically exported from Belarus mainly to Russia and CIS countries. More than 57% of chemical products being exported from Belarus accounted for mineral fertilizers (Belarus is the leading countries in terms of production and export of potassium fertilizers).

⁴ In this chapter foreign trade includes only foreign trade of goods.

Other large exporting sectors of Belarusian economy include manufacture of motor vehicle and equipment (6.9%), metal industry (6.5%), manufacture of machinery and equipment (4.6%). Mining industry mainly exporting raw oil takes around 4.6% of Belarusian export of goods.

Structure of Belarusian exports of goods in 2014



Comparing the structure of exports with 2011, the share of motor vehicles and equipment industry dropped significantly from 12.2% to 6.9%. This happened mostly due to sharp decrease of motor vehicles exports by more than 50% in value terms. The share of chemical industry has also decreased from 15.9% in 2011 to 11.8% in 2014 (main reason - reduction of fertilizers' supply by almost 20% in value terms, other chemical products – by 70% in value terms).

There also was a slight decrease of coke and refined oil products industry share in total export: from 31.2% in 2011 to 29.3% in 2014

At the same time, the share of food industry in total export increased by 4.2 p.p. to 13.1% in 2014 (mainly due to growth of dairy products export by 37% in value terms).

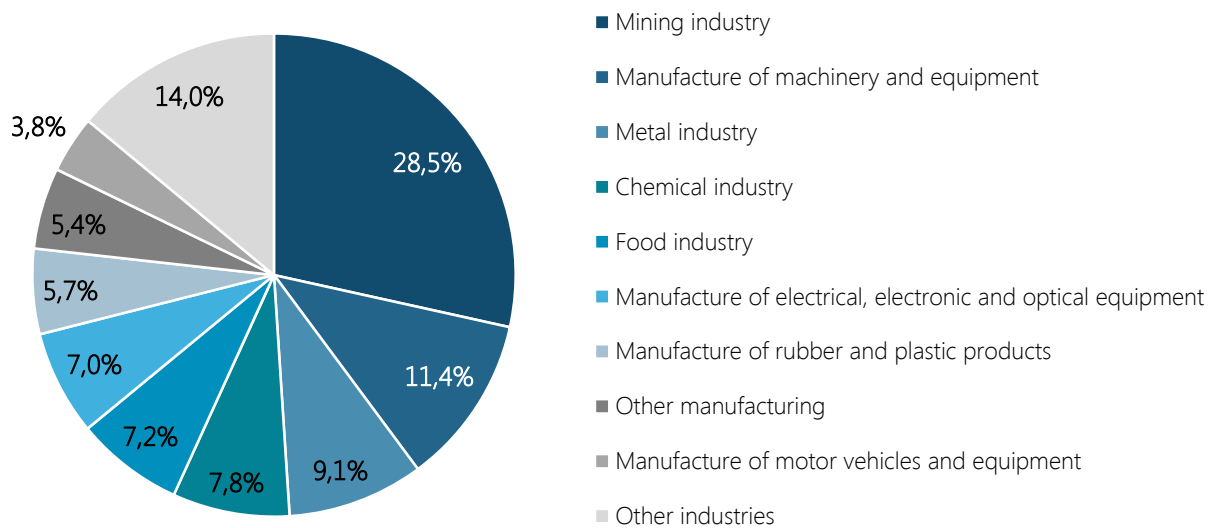
Table 4 Structure of Belarusian exports of goods by industry

	2011	2012	2013	2014
Export, total	100%	100%	100%	100%
including				
Agriculture	0,6%	0,5%	0,9%	1,3%
Fishing	0,1%	0,1%	0,3%	0,4%
Mining industry	4,1%	3,8%	4,7%	4,6%
Food industry	8,9%	9,3%	13,3%	13,1%
Textile industry including manufacturing of wearing apparel	3,5%	3,0%	3,8%	3,6%
Manufacture of leather and related products, footwear industry	0,5%	0,4%	0,5%	0,4%
Wood processing industry	2,3%	2,2%	3,2%	3,6%
Manufacture of paper and paper products	0,6%	0,5%	0,6%	0,6%
Manufacture of coke and oil products	31,2%	32,1%	28,1%	29,3%
Chemical industry	15,9%	16,5%	9,0%	11,8%
Manufacture of rubber and plastic products	3,8%	4,0%	4,9%	4,3%
Manufacture of other non-metallic mineral products	1,5%	1,6%	2,2%	2,2%
Metal industry	6,0%	5,5%	6,3%	6,5%
Manufacture of machinery and equipment	4,5%	4,3%	5,6%	4,6%
Manufacture of electrical, electronic and optical equipment	3,1%	3,1%	3,7%	3,4%
Manufacture of motor vehicles and equipment	12,2%	8,7%	8,4%	6,9%
Other manufacturing	1,2%	4,3%	4,6%	3,4%

The largest share of Belarusian imports of goods accounted for **mining industry - 28.5%** in 2014. The main products being imported are raw oil (18.8% of total imports) and natural gas (8.8% of total imports). The second place accounted for manufacture of machinery and equipment (11.4%).

Other large importing sectors of Belarusian economy include metal industry (9.1%), chemical industry (7.8%), and food industry (7.2%). The share of manufacture of electrical, electronic and optical equipment sector amounted to 7.0% of imports in 2014.

Structure of Belarusian imports of goods in 2014



2. Analysis of industries

Agriculture

Share in GDP, 2014	7,7%
Share in export, 2014	1,3%
Share in revenues, 2014	4,9%
Share in number of employees, 2014	13%

Agriculture has been one of the priority sectors for Belarusian government for the last two decades. A key advantage of the agricultural sector is availability of rather cheap input factors. Most of fertilizers are produced in Belarus and are provided to agricultural enterprises at subsidised price level. Agricultural machinery is also broadly produced in Belarus and is often sold on credit to the domestic agricultural enterprises on privileged terms, as part of the state support program to the machine building sector. Agriculture also benefits from low fuel and energy prices, as Belarus imports oil and gas from Russia on privileged terms. Furthermore, acquisition of fuel by agricultural enterprises is subsidised by the state.

At the same time the share of agriculture in country's GDP has declined by 1,8 p.p. since 2012 and currently accounts for 6,7%, showing the overall development of the economy towards lower share of the agricultural sector. In contrast to the share in GDP, agricultural production volume showed growth over 2011-2014. The total increase within this period was almost 2 862 million dollars (from 9 925 million dollars in 2011 to 12 787 million dollars in 2014).

Apart from domestic consumption, agricultural products are exported to foreign markets (mainly Russia), accounting for 1,3% of the total export in 2014. After a slight drop by 0,1 p.p. in 2012 the share of agriculture in total export added 0,8 p.p. during 2013-2014. The share in total import showed a significant growth in 2014 increasing by 1,6 p.p. comparing to 2013 and 2,4 p.p. comparing to 2011. The share of capital investment into the agricultural sector has been fluctuating within 10,0%-16,1% during 2011-2015.

Table 5 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	8,3	8,5	7	7,7%	6,7% ⁵
Share in export, %	0,6%	0,5%	0,9%	1,3%	-
Share in import, %	1,0%	1,3%	1,8%	3,4%	-
Production volume, million dollars	9 925,72	11 553,1	11 790,1	12 787,7	8 409,3
Share in capital investments, %	13,0%	16,1%	14,1%	10,0%	-

The revenue generated by agriculture had been steadily increasing over 2011-2014 from 6.1 billion dollars in 2011 to 9.4 billion dollars in 2014. Alongside, its share in total revenue has also been growing. Agriculture accounted for around 3.8% of total revenue in 2011 and 5% in 2014, showing growth by 1,2 p.p. After a significant increase of agricultural net profit in 2012 by 405 million dollars and dramatic decline by 774 million dollars in 2013 the sector demonstrated growth by 187 million dollars in 2014 resulting in 566 million dollars of net profit.

The number of enterprises engaged in agriculture in Belarus did not change substantially during 2011-2013, remaining on the level of 4200-4300 entities. However, mostly due to reorganization of state owned agricultural companies the number increased considerably in 2014 up to 4924 agricultural enterprises with 174 of them being unprofitable.

The revenue per employee in agricultural sector is rather low compared to international benchmarks, however, grew at an average rate of 19.5% during 2011-2014 and accounted for 24 450\$ in 2014. This growth is mostly associated with large state investments in the dairy and cattle breeding branches.

Table 6 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	4 275	4 223	4 264	4 924
Revenue, million dollars	6 118,4	8 153,0	8 642,8	9 431,8
Share in overall revenue, %	3,73%	4,36%	4,43%	4,94%
Share of micro and small enterprises in revenue, %	5,87%	5,59%	5,88%	6,25%
Net profit, million dollars	748,0	1 153,3	379,6	566,3
Taxes, mln \$	890,5	938,5	1 007,2	890,5
Revenue per employee, thou \$	14 310	19 680	21 660	24 450
Number of enterprises reported losses	24	26	153	174

⁵ Hereinafter, share in GDP in 2015 is based on preliminary data of the National Statistics Committee

The share in average number of employees working in agricultural sector had been slowly falling during 2011-2014. Within this period the index decreased by 0,8 p.p. from 13,8 in 2011 to 13,0% in 2014. The nominal wage almost doubled since 2011 and was 450,6\$ in 2014. However, after a devaluation of the national currency in the beginning of 2015 there was a considerable downfall in wages in USD terms.

Agriculture generates 5,1% of tax revenues (profit tax +VAT) of Belarusian budget which is almost the same as construction sector (5.8%) or mining sector (4,8%). However, the contribution of agriculture in financing state expenditures is less than its contribution to GDP and capital investments (almost fully financed by the state).

Table 7 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	13,8%	13,7%	13,2%	13,0%	-
Nominal wage, \$	236,7	330,7	431,2	450,6	304,8 ⁶

Conclusion

In Belarus agriculture is a priority sector for the state. The state attention to this sector is expressed in the share of state ownership in sector, strong sector regulation and massive investments and subsidies for agricultural producers.

Belarus has specialization and strong positions in dairy agriculture which is based on climate conditions, traditions and implemented investments financed by the state.

The industry is characterized by strong price regulation with fixed prices for basic agricultural raw materials in order to shift margins to food processing industry. The state also mostly defines the volumes of crops to be grown for state purchasing program.

The agricultural sector of Belarus is represented mainly by large state-owned enterprises. The integration has mostly horizontal character (combining of crop farming and animal breeding, dairy). Largest agricultural companies are also involved in food processing in their wish to gain some additional margins.

Private sector is represented mainly by subsistence farming (22.1% of the total agricultural output), while individual farm enterprises produce only about 1.5% of the total agricultural output. Furthermore, agricultural land is fully state-owned, while enterprises and farmers have to rent it.

In recent years subsidies for the agriculture sector oscillated between 9 and 12 per cent of GDP (most common forms of subsidies and preferences: loans at below-market interest rate, government guarantees for loans to agricultural enterprises, cross-subsidization, tax exemptions, direct government spending). **The sector benefited much from directed lending** (ca 20% of all loans provided to the economy in Belarus in 2006–2011 went to agriculture). **As a result, agriculture accumulated around 10-15% of all investments in fixed capital in Belarus, and the infrastructure that is in place is modern and of a high level.** During last decade the state implemented large-scale

⁶ Hereinafter, nominal wage in 2015 is based on preliminary data of the National Statistics Committee

investments into basic agricultural assets: dairy farms, poultry farms, pig-breeding complexes, vegetable and potato stores, etc **At the same time the critical issue with many agricultural enterprises is the level of debt/quazi-debt which needs restructuring.**

So the basic areas for investments in the industry may be associated with the following directions:

1. Capitalizing on the infrastructure in place by improvement of operations and performance, which i.a. may include reorganization, introduction of efficient technologies, management, marketing know-hows and sales, etc.
2. Development of new products and markets: e.g. strengthening of specialization in selected agro companies from basic crops to more value added products (vegetables, small cattle, etc.), or developing new markets (sale of green fodder to Middle East, etc.)

In the long-term the efficiency of the sector depends on the reforms and development of private individual farming. E.g. Over the last 15 years private farmers have increased production by 16 per cent annually, i.e. 10 percentage points faster than the state-owned collective farms, though their share in total output is less than 2%. **Accession to the Customs Union (CU) and the Common Economic Area (CEA) with Russia and Kazakhstan (according to it Belarus should follow the WTO regulations of agriculture subsidization) may serve an external anchor for faster and deeper reform of the state support of agricultural sector.**

Mining industry

Share in GDP, 2014	0,8%
Share in export, 2014	4,6%
Share in revenues, 2014	1,6%
Share in number of employees, 2014	0,7%

Belarus is not rich with natural resources. Its availability has defined the specialization of Belarus' mining industry. Belarusian mining industry is mostly concentrated on extraction of potash salt⁷, construction sand, raw oil, etc. The location of the enterprises is determined by location of resources. Oil production is about 1.5 m tons in Belarus.

The share of mining industry in total industrial output is not that high – only 1.4% in 2014. Almost the same figure accounts for contribution to GDP – 0.8%.

While mining industry supplies foreign markets at the amount of 1.6 billion dollars, it imports goods at the total amount of 11.5 billion dollars. **The share of mining industry in Belarusian imports is the largest one and takes about 29%.** The main product being imported is raw oil.

Table 8 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	1,1	1,1	1,0	0,8	0,7%
Share in export, %	4,1%	3,8%	4,7%	4,6%	-
Share in import, %	33,1%	27,4%	28,6%	28,5%	-
Share in production volume, %	1,47%	1,40%	1,61%	1,46%	1.40%
Production volume, million dollars	909,77	1 032,77	1 087,39	961,48	616,48
Share in capital investments, %	3,0%	2,40%	1,90%	1,50%	-

There are about 90 enterprises working in mining industry. More than 70% of them are micro and small companies. However, the role of **medium and large enterprises** is highly significant: they **generate more**

⁷ Statistical data on mining industry does not include potash salt. It is included in chemical industry.

than 99% of all industry's revenue. Net profit of mining industry shows negative tendency: it has been decreasing over the recent years (CAGR = -14%). The number of enterprises reported losses has increased to 8 companies in 2014.

Table 9 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	59	60	72	91
Revenue, million dollars	3260,9	4063,7	3120,9	3054,9
Share in overall revenue, %	1,99%	2,17%	1,60%	1,60%
Share of micro and small enterprises in revenue, %	0,14%	0,18%	0,33%	0,92%
Net profit, million dollars	467,81	465,25	386,80	293,53
Taxes, mln \$	1 203,1	1 012,4	962,3	1 203,1
Revenue per employee, thou \$	155 730	191 739	148 299	155 046
Number of enterprises reported losses	1	1	5	8

Mining industry hires about 20.7 thou employees that accounts for 0.7% of total number of people employed in the economy. Nominal wages in mining industry has always been very high. In 2013-2014 years nominal wages reached up to 950 dollars. At present, salaries have sharply dropped to the amount of 560 dollars.

Table 10 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	0,7%	0,7%	0,7%	0,7%	-
Nominal wage, \$	596,6	785,9	943,7	932,7	559,1

Enterprises in mining industry mostly are not engaged in innovation activities. Total sum of expenditures on innovation activities totaled 28 million dollars in 2014 or 0.9% of the industry' revenue.

Table 11 Innovation activity

Indicator	2014
Number of enterprises involved in innovation	8
Expenditure on innovation activities, \$ thou	28067
The ratio of innovation expenditures to revenue	0.9%



Conclusion

Belarus has scarce mineral resources. The Belarusian mining industry is represented by oil extraction (ca. 1,5 mn tpa) and development of basic mineral deposits for construction materials production (chalk, stone, sand, etc.). Potash fertilizers production is included in chemical industry.

The role of the industry in overall economy is rather limited (ca. 1-2% of GDP, production, employment). Due to the fact that mining industry includes oil extraction which 100% exported to the EU the branch is strategically important for the state because it represents ca. 5% of tax revenues of state budget.

The perspective area of investments in the industry is associated with **exploration of economically feasible deposits of fuel and non-fuel mineral resources** which could find strong support from the Government.

Food industry

Share in GDP, 2013	5,1%
Share in export, 2014	13,1%
Share in revenues, 2014	8,7%
Share in number of employees, 2014	5,5%

Food industry plays a leading role in the structure of industrial production in Belarus. Along with potash processing and fuel complex, food industry is a leader in the production of industrial goods. Belarusian food industry is very diverse and includes following sub-industries: oil and fat, confectionery, canned goods, starch and syrup, pasta, cheese, dairy, cereal, meat, fish, fruit and vegetables, bread, sugar, brewing, etc.

The share of food industry in overall industrial production is around 24% - **the highest share**. Food industry's production volumes accounted for 10.8 billion dollars in 2015⁸. Food industry also **generates the highest share of value added** across all other sectors of manufacturing industry. Its contribution to GDP accounted for 5.1% in 2013.

Republic of Belarus has highly developed dairy industry. While the share of Belarus in world GDP is very low (0.1%), Belarus accounts for 1.4% of world milk production and **5% of the world exports of dairy products**. At present, Belarus fully satisfies domestic demand for milk and its processing products and has significant potential for the supply of dairy products to foreign markets.

Table 12 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	4,1	4,1	5,1	-	-
Share in export, %	8,9%	9,3%	13,3%	13,1%	-
Share in import, %	5,4%	5,8%	6,7%	7,2%	-
Share in production volume, %	17,65%	18,46%	22,42%	23,71%	24,0%
Production volume, \$ billion	10,9	13,6	15,1	15,6	10,8
Share in capital investments, %	4,9%	4,6%	3,9%	4,6%	-

⁸ Based on preliminary data. Excluding micro enterprises.

Belarus exports wide range of food products. In particular, it supplies other countries with dairy products (milk and milk products, cheese, yogurts, etc.), meat products, canned goods, candies and pastries, etc. The share of food industry's exports accounted for 13.1% in 2014. It increased significantly both in value and natural terms in 2011-2014. However, due to crisis on the main foreign markets (Russia, Ukraine), and devaluation of Russian ruble the export of food products in January-November 2015 has decreased by 26% in UED terms. In regional distribution, almost all food products are exported to Russia and CIS countries.

There are more than 1 000 companies that produce food, alcoholic and non-alcoholic beverages and tobacco: its number has increased by 20% in recent years. Currently, there are about 200 meat and meat products producers in Belarus. "Grodno meat processing plant" JSC, "Volkovysskmeat processing plant" JSC, "Berezameat preserves plant" JSC, "Slutskmeat processing plant" JSC, "Vitebsk meat processing plant" JSC, "Brest meat processing plant" JSC are the largest ones.

Milk processing in the country is concentrated at around 40 enterprises; the range of dairy products exceeded 1,2 thou items. The largest industry's enterprises are: "Savushkin product", "Babushkina Krynka", "Dairy products", "Bellakt", "Moloko g.Vitebsk", "Berezovsky cheese-making plant", «Slytsk cheese-making plant", "Glubokoye DCF".

Table 13 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	925	915	942	1 112
Revenue, million dollars	11239,2	14164,4	16525,2	16539,8
Share in overall revenue, %	6,8%	7,6%	8,5%	8,7%
Share of micro and small enterprises in revenue, %	5,6%	6,8%	7,0%	6,9%
Net profit, million dollars	2 088,42	2 536,79	1 903,98	1 802,17
Taxes, mln \$	-	4 705,3	5 250,5	5 676,7
Revenue per employee, thou \$	70 641	88 486	102 909	104 335
Number of enterprises reported losses	12	51	68	86

Food industry generates around 16.5 billion dollars of revenues with level of net profit more than 1.8 billion dollars. Revenue per employee totaling 104.3 thou dollars is **among TOP-6 labor productivity rates**. Moreover, this figure shows a positive tendency: it has increased by 48% from 2011.

Food industry employs about 165 thou persons. This number hasn't changed a lot in recent years except for 2014 (from 168.8 thou in 2011 to 165.6 thou in 2014). The share of employees occupied in food industry in total number of employed people is quite high. The share has been slightly increasing since 2011 and in 2014 reached 5.5%. Food industry hires 18% of all employed in manufacturing sector.

Food industry is the largest tax payer after wholesale and retail trade. Total amount of taxes accounted for 14.5% of taxes. Moreover, this figure was growing every year in 2012-2014.

Nominal wage in food industry showed sustainable growth up to 2015 (630 dollars in 2014) when it sharply declined to the level of 433 dollars.

Table 14 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	5.4%	5.5%	5.5%	5.5%	-
Nominal wage, \$	355,3	461,6	612,9	629,9	432,5

Over the last few years a lot of investments have been made in modernization and reconstruction of buildings and facilities. All major and the most important investment projects that have started in 2005 draw to a close in 2015. Thus, the investment activity that was observed during last few years allowed to almost fully modernize the whole industry.

Table 15 Innovation activity

Indicator	2014
Number of enterprises involved in innovation	94
Expenditure on innovation activities, \$ thou	57 086
The ratio of innovation expenditures to revenue	0.4%

Conclusion

Food industry in Belarus is dominated by production of meat and dairy products. They account for a half of the food industry output. Production of flour, cereal products, preserved fish and fish products do not play a significant role in the food industry, representing ca 6% of the sector's output. Ready-made animal feed production had a contribution of 14.5% in food industry production in 2013. Other important products of the food industry are alcoholic beverages and tobacco that account for around 10% and 3% of food production.

Belarus food export is concentrated. Belarus exports significant volumes of dairy products, meat and meat products to Russia. Other important export goods are sugar, alcohol, tobacco and rape oil. Their export direction is more diversified, as they are also exported to other CIS countries and to the EU.

The main export market is Russia where Belarus products control over significant share (furthermore, Russia is a single market for most of the food exports making export very sensitive to the developments on Russian market and trade regulations applied by this country). At the same time Russia's WTO accession as well as introduction of programs of domestic milk and meat production development can significantly increase competition on this market. **Now these risks are minimized by**

economic sanctions that Russia imposed on the EU and some other developed countries and in the short-term food producers can gain from the circumstances.

Although food production is represented mainly by large state-owned enterprises, **large private companies also exist in the sector**. The largest enterprises within the sector are those producing meat products, dairy products, alcohol, sugar, and confectionary include JSC «Savushkin product», Group of companies "Servolux" (poultry, meat and dairy), Incofood, Slutsk Sugar Refinery Olivaria Brewery, Heiniken Brewery ICJSC, JLLC "MSVZ-Akvadiv". **One of the most perspective industries from the point of view of infrastructure available, competences, traditions and other competitive advantages is dairy processing.**

- Dairy processing in Belarus has experienced a tremendous growth by a factor of 2.45 over the last decade. Belarus is one of the leading exporters of dairy products in the world. According to IDF (International Dairy Federation), in the list of the world's leading exporters of dairy products (excluding trade between EU member states) Belarus occupies the fifth position in the world in the segment of hard cheeses (5.5% of world exports), the fifth position – in dried skim milk – (3,2%), the sixth position – and dried whole milk (1.2%). At present, Belarus supplies its dairy products to 50 countries; however, the majority is exported to Russia.
- Serious weakness of the industry so far is a strong focus on the CIS and especially on Russia as a trading partner, mainly because of in some respects identical quality and food safety standards.

Belarus has experienced consolidation of the dairy industry, albeit mostly administratively. State controlled small and unprofitable enterprises have been merged with more large and effective enterprises. Some of them are the following: «Babushkina Krynka», «Zdravushka-milk», "Lida Milk Canning Plant", "Bellakt".

- Savushkin Product (100% private company owned by a local businessman Alexander Mashensky) is by far the largest dairy producer in Belarus, with a market share of 16.7% in whole-milk products market (2013)
- **A long-term successful strategy for Belarus dairy is entering EU markets, this however depends on the state willingness and commitment to changes in regulation and control of the industry, harmonization with international food safety and quality standards is a must.** To penetrate the EU dairy markets, Belarus government should continue the process of attaining a 'third country' status with the EU⁹. Moreover, Belarus should harmonize its legal base with the EU Acquis and adopt technical regulations based on the relevant EU Directives.

The food products which do not require very specific standardization with the EU have proved their competitive position in the EU. Food products that are mostly exported to EU with double digit annual growth rates during last 5 years are: rape oil, berries, mushrooms, oil cake of rape seeds, beet-pulp and beer.

⁹ At the moment Belarus does not have this status in dairy products for food consumption (Commission Regulation (EU) # 605/2010) thus it cannot export dairy products for food consumption to the EU

Textile industry including manufacture of wearing apparel

Share in GDP, 2013	1,3%
Share in export, 2014	3,6%
Share in revenues, 2014	1,0%
Share in number of employees, 2014	3,2%

Belarusian textile is a broad and perspective sector of the country's economy. The most widespread branch is knitwear, 49% of which accounts for women wear production. The most resistant segment to crises is children's wear. Not only did the demand increase, but also grew the share of domestic children's clothes consumption within 2012-2014. The sales of other segments across Belarus proved to be least resistant, but showed positive dynamics and wear up ca. 4%-11% in 2014.

The production volume of fabric totaled 166,8 million m², knitwear – 55 million units, hosiery – 140 million pairs. Total output of fabric and knitwear declined in 2014 by ca. 8%, however hosiery added 2% in comparison with 2013.

Share of domestic goods in retail turnover: textile goods – 64,6%, outerwear – 54,3%, underwear – 74,5%, sportswear – 51,2%, knitwear – 54,1%, hosiery – 82%, head wear – 47,1%, accessories – 49,6%.

Table 16 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	1,6	1,4	1,3	-	-
Share in export, %	3,5%	3,0%	3,8%	3,6%	-
Share in import, %	2,0%	2,0%	2,3%	2,5%	-
Share in production volume, %	3,06%	2,91%	3,24%	3,02%	2,80%
Production volume, million dollars	1 898,20	2 142,37	2 184,25	1 984,18	1270,10
Share in capital investments, %	0,7%	0,7%	0,7%	1,1%	-

Overall production volume remains around 2 billion dollars p.a. with slight fluctuations within the period of 2011-2014 yy. The revenue index correlates with production volumes, though is more turbulent, showing bigger changes.

The share of textile industry's export in the economy remains at the level of 3%-4%. The largest part of export accounts for other textile products (bed linen, blankets, etc.) and totals 25%.

The export of Belarusian apparel was sustainably increasing during 2009-2014 up to 586 million dollars in 2013 with the only decline in 2014 down to 527 million dollars.

In spite of the 22,4% increase in textile import in 2014, export exceeded the volume of import by ca. 200 million dollars.

Table 17 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	1 702	1 808	1 841	1 938
Revenue, million dollars	9514,9	8439,8	6263,2	6552,6
Share in overall revenue, %	1,1%	1,1%	1,1%	1,0%
Share of micro and small enterprises in revenue, %	20,2%	20,3%	21,2%	22,7%
Net profit, million dollars	338,18	257,75	173,98	92,52
Taxes, mln \$		151,3	156,0	134,2
Revenue per employee, thou \$	17 767	20 383	23 632	22 007
Number of enterprises reported losses	35	30	72	75

The industry is represented by almost 2 000 organizations, which account for ca. 1% of the total revenue of Belarus. The **revenue per employee** has grown substantially since 2011.

96% of the companies are profitable with the aggregated net profit of 92.5 million dollars. Although the production volumes remain approximately at the same level, net profit shows a considerable decrease.

Key players in the market are (with revenue):

- JSC "Mogotex" (fabric for special and uniform clothing, riot gear, interior fabrics, technical textile, garment) – 99,3 million dollars (2014), 52,4 million dollars (three quarters of 2015);
- OJSC "Baranovichi Cotton Production Amalgamation" (ready-made goods, fabrics, table linen, bandages, gauze, yarn, overalls) – 45,4 million dollars (2014), 22,7 million dollars (three quarters of 2015);
- OJSC Industrial Trading Amalgamation "Polesie" (outer knitted clothes, wool mixture and high-bulk yarn, knitted fabric) – 26,6 million dollars (2014), 15,2 million dollars (three quarters of 2015);
- JSC "Lenta" (textile goods, curtain cloth, medical bandaging materials, textile for military uniforms) – 26,3 million dollars (2014), 13,7 million dollars (three quarters of 2015);

- JSC "Vitebsk Carpets" (tufted goods, woven carpet goods, waste for reclamation, carpet floorings) – 64,4 million dollars (2014), 30,4 million dollars (three quarters of 2015);
- OJSC "Svitanak" (underwear, light knitwear, sportswear) – 42,4 million dollars (2014), 20,2 million dollars (three quarters of 2015);
- JSC "Comintern" (men's suits) – 17,6 million dollars (2014), 7,8 million dollars (three quarters of 2015),
- JSC "8 Marta" (knitted and leg wear) – 23,9 million dollars (2014), 12,4 million dollars (three quarters of 2015);
- JSC "Elema" (men and women clothes) – 26,9 million dollars (2014), 11,1 million dollars (three quarters of 2015);
- JSC "Gronitex" (yarn and sewing thread) – 23,5 million dollars (2014), 11,8 million dollars (three quarters of 2015);
- JSC "Kupalinka" (underwear, outer knitwear) – 13,7 million dollars (2014), 6,9 million dollars (three quarters of 2015);
- JSC "Kamvol" (fabric for military, fabric for school uniforms, suit fabrics, yarn) – 11,5 million dollars (2014), 4,1 million dollars (three quarters of 2015).

The largest private enterprises are:

- Serge Ltd. (knitted underwear, casual wear);
- SLLC "Stetskevitch-spetsodezhda" (working wear and footwear, protective equipment);
- "Conte Spa" (hosiery and knitwear);
- CJSC "Milavitsa" (women's lingerie);
- "Mark Formelle" (full range of men, women, children wear).

Table 18 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	3,6%	3,6%	3,4%	3,2%	-
Nominal wage, \$	248,8	327,8	413,1	418,8	295,2

In terms of social role, textile and clothing industry **employs a significant number of workers**: around 3.2% of all employees. This industry takes the third place in terms of employment after wholesale and retail and manufacture of machine and equipment. The average **nominal wage** across the industry is **one of the lowest in the country** and is currently below 300 dollars.

Table 19 Innovation activity

Indicator	2014
Number of enterprises involved in innovation	42

Expenditure on innovation activities, \$ thou	9832
The ratio of innovation expenditures to revenue	0.7%

Recent investment projects in textile industry:

JSC "Mogotex"

During the modernization of JSC "Mogotex" from 2008 till 2014 the company received 38 million dollars of investment. The funds were spent on factories reconstruction which led to the 30% increase in production volume in foreign currency terms.

OJSC "Baranovichi Cotton Production Amalgamation" (BPHO)

According to the investment project "Development of OJSC "Baranovichi Cotton Production Amalgamation" implemented in 2012-2015 yy., the company put into service 207 machinery units at three factories. The spinning mill received 8 machinery units, which resulted in the double increase of labour efficiency. 171 machinery units were installed at the weaving mill, allowing to start brand new fabric production. 28 machinery units were put into service at the finishing factory, which allowed to run a unique technology of fabric trimming – the only one in the former Soviet Union countries.

The total project cost is 34,9 million euro, of which 30,2 million euro were spent on equipment and 4,7 million euro on installation and construction work. The project was financed with loans from JSC "Savings Bank "Belarusbank" (21,4 million euro) and Development Bank of the Republic of Belarus JSC (11,9 million euro). 1,6 million euro were withdrawn from internal funds.

JSC "Kamvol"

JSC "Kamvol" has been implementing the investment project of the company modernization, set by the Presidential Decree of the Republic of Belarus of 14.11.2013. As of November, 2015 the company purchased 170 units of machinery priced at 35,9 million euro. On 17 December, 2015 the decree on additional investment was signed providing 50 million euro in further investments. They are to be spent on modernization and current assets enhancement. The project is primarily financed by loans from JSC "Savings Bank "Belarusbank" as well as public budget loan.

Conclusion

The basis of Belarusian textile industry was built in the Soviet Union times. The biggest companies were not privatized and now **operate under state control**. The biggest companies include OJSC "Mogotex" (synthetic/semi-synthetic fabrics with specific functions for workwear, home textiles, backing, etc.), OJSC "BPHO" (cotton fabrics, bed and table linen. etc) OJSC "Vitebsk carpets", OJSC "Svitanak Zhodino" (knitwear), OJSC "Polesie" (knitwear), a number of flax processing plants, etc.

The preserved state-owned sector in the industry created good conditions for emerging of a **small and medium private companies cluster** which benefits from qualified personnel, sustained traditions and access to basic infrastructure and raw materials. Most popular representatives of this cluster are: CJSC "Milavitsa" (women's lingerie) was privatized in 2000s and acquired by Estonian company Silvano Fashion Group; Serge Ltd. (knitted underwear, casual wear); Conte Spa" (hosiery and knitwear); "Mark Formelle" (full range of men, women, children wear).

The main **export market is traditionally Russia** and Belarusian producers have to compete in Russia with Asian textiles and apparel, which appeared to be more competitive due to lower labor costs and access to basic raw materials and other advantages.

At the same time the sector is labor intensive and in view of recent economic downturn together with by Belarusian ruble devaluation **the labor costs in textile industry became comparable to the Asian benchmarks**. The average salary in textile and apparel industry in Belarus in 2015 accounted for 295\$ a month. Together with proximity to main consumer markets (Russia, EU) this forms good fundamental for being competitive on foreign markets. **In this view further investments in the sector may be associated with utilization of modernized capacities of large enterprises by improving the companies' operations through introduction of efficient technologies, management and marketing.**

Manufacture of leather and footwear industry

Share in GDP, 2013	0,3%
Share in export, 2014	0,4%
Share in revenues, 2014	0,3%
Share in number of employees, 2014	0,6%

Leather and footwear industry is currently experiencing modernization. The President of Belarus stresses the importance of upgrading the product lines and quality of goods. In addition he points out, that domestic raw materials for the sector must be processed and utilized at Belarusian footwear and leather factories.

The main leather processing plants are OJSC "Minsk Leather Production Association" with revenue of 27,8 million dollars (2014), 17,5 million dollars (three quarters of 2015), and OJSC "Bobruisk Leather Plant" - 17,0 million dollars (2014), 10,1 million dollars (three quarters of 2015), which are currently in focus of modernization. Key Belarusian footwear producers are JV "Marko" Ltd., JV "Belwest" Ltd., OJSC "Grodno Footwear Company "Neman" - 13,2 million dollars (2014), 6,3 million dollars (three quarters of 2015), OJSC "Obuv" - 18,1 million dollars (2014), 8,3 million dollars (three quarters of 2015), and OJSC "Luch".

Leather and footwear industry is **among the smallest industries** in the Belarusian economy. It accounts for 0,3% of the country's GDP, 0,4% of export and 1,1% of import. These indicators remain relatively sustainable due to the stable volumes of production. The sector did not experience any dramatic downfalls and its share in overall production volume is ca. 0,8% with 511 million dollars – 547 million dollars of total production volume over 2011-2014. Leather and footwear industry enjoys relatively low capital investment (0,10% of total capital investment in 2014).

Table 20 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	0.4	0.3	0.3	-	-
Share in export, %	0,5%	0,4%	0,5%	0,4%	-
Share in import, %	1,0%	0,8%	1,1%	1,1%	-

Share in production volume, %	0,82%	0,73%	0,81%	0,80%	0,70%
Production volume, million dollars	511,61	538,01	547,32	522,80	320,00
Share in capital investments, %	0,04%	0,1%	0,04%	0,10%	-

There are ca. 150 companies currently operating within the industry with 8,7% of them being unprofitable in 2014. The revenue dynamics follows the tendency in production volume and does not show any significant declines either. However, net profit has been declining since 2011 and shows 50 million dollars in 2014.

Table 21 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	129	139	1 440	150
Revenue, million dollars	497,3	546,1	592,6	536,5
Share in overall revenue, %	0,3%	0,3%	0,3%	0,3%
Share of micro and small enterprises in revenue, %	6,9%	6,4%	7,5%	6,8%
Net profit, million dollars	129,43	88,56	64,20	50,22
Taxes, mln \$		69,3	70,6	65,6
Revenue per employee, thou \$	28 363	31 041	35 492	33 148
Number of enterprises reported losses	3	3	8	13

Leather and footwear industry employs around 18 thou workers or 0.6% of total number of employees. This industry takes the last place after manufacture of coke and oil products by number of employees.

Table 22 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	0,6%	0,6%	0,6%	0,6%	
Nominal wage, \$	277,2	369,3	491,0	475,2	315,1

Expenditure on innovation was around 2,3 million dollars in 2014, however it is expected to increase according to the plan set by the President for 2015-2016.

Table 23 Innovation activity

Indicator	2014
Number of enterprises involved in innovation	10
Expenditure on innovation activities, \$ thou	2283
The ratio of innovation expenditures to revenue	0.5%

Conclusion

The leather industry of Belarus is represented by a number of state and private owned companies. For example, one of the largest footwear company JLLC “Belwest” was created in late 1980 as a JV between German company Salamander and Vitebsk footwear company “Krasny oktiabr”, later Salamander exited the project and now JLLC “Belwest” is a Belarusian-Russian Joint Venture.

Although Belarus has developed cattle breeding sector and 4 state owned leather processing companies, the Belarusian footwear industry is largely dependent on imports of leather and synthetic footwear components. The existing leather processing companies are equipped with physically and morally outdated equipment and the majority of leather is exported with low level of processing. That’s why in late 2014 the President approved the state support (state guarantee and Interest rate caps) for LT loans worth 23,5 mn EUR for Minsk Leather Production Association. Smaller investments are also made in Leather processing plant in Bobruisk. According to preliminary estimates after successful completion of the modernization ca. 25% of capacities of leather processing plants won’t be utilized. In this respect in case the modernization of leather processing sector is a success with respect to technologies, marketing and management, the further investments could be made in two directions:

- Utilization of capacity of leather processing plants by creating JVs with European footwear brands
- Further development of footwear components business through improvements of operations of modernized leather plants and/or establishing of production of other (synthetic) footwear components.

Wood processing industry

Share in GDP, 2013	0,6%
Share in export, 2014	3,6%
Share in revenues, 2014	0,6%
Share in number of employees, 2014	1,2%

Wood processing industry is **one of the most important sectors** in Belarusian economy. However, its potential is still not utilized to its full extent. Belarus has such an important competitive advantage in woodworking industry such as **access to raw materials (big area covered with forests)**.

Wood processing industry accounts for 2% of total industrial output. Belarus is self-sufficient with forests raw materials so the amount of imports is quite low – 384 million dollars (0.9% of Belarusian imports). At the same time, wood processing industry is export oriented one. The total **share of its export** has been increasing over the last years and reached **3.6%** in 2014. Belarus exports wood products to Russia, Poland, Germany, the Baltic States, Kazakhstan, Ukraine and other countries.

Taking into consideration extensive modernization of wood processing plants worth more than 1 bn EUR, there was a rapid growth of share in capital investment from 1.8% in 2011 to 4.5% in 2014.

Table 24 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	0.7	0.5	0.6	-	-
Share in export, %	2,3%	2,2%	3,2%	3,6%	-
Share in import, %	0,6%	0,7%	0,9%	0,9%	-
Share in production volume, %	1,32%	1,29%	1,73%	1,97%	2,0%
Production volume, million dollars	818,43	945,67	1 165,41	1 291,40	893,0
Share in capital investments, %	1,8%	3,00%	3,1%	4,5%	-

Belarusian wood processing industry is represented mainly the Belarusian Production and Trade Concern of timber, woodworking and pulp and paper industry "Bellesbumprom". The concern includes 46 enterprises of different forms of ownership.

The key enterprises of wood processing industry are the following (under control of the Development Bank of the Republic of Belarus):

- OJSC "Vitebskdrev" (28.3 million dollars revenue in 2014, 12.0 million dollars revenue – three quarters of 2015)
- OJSC "Gomeldrev" (26.9 million dollars revenue in 2014, 11.8 million dollars revenue – three quarters of 2015)
- OJSC "Mostovdrev" (31.8 million dollars revenue in 2014, 16.8 million dollars revenue – three quarters of 2015)
- OJSC "Rechitsadrev" (17.6 million dollars revenue in 2014, 11.2 million dollars revenue – three quarters of 2015)
- OJSC "Borisovdrev" (8.7 million dollars revenue in 2014, 6.4 million dollars revenue – three quarters of 2015)
- FanDOK (16.0 million dollars revenue in 2014, 6.2 million dollars revenue – three quarters of 2015)
- Mozyr DOK

They produce a wide range of products including particle boards, oriented strand boards, MDF, LDF, HDF, laminate flooring, different types of plywood.

All together wood processing plants generates around 1billion dollars (CAGR = 8.3%). This sum accounts for 0.6% of all revenues. At the same time, the share of micro and small enterprises amounted for around 38% of industry's revenues. Unlike revenues, net profit in wood processing industry declined more than twofold. The dramatic decline in profitability was caused by the toughening competition on Russian and EU markets which pressed the prices down driven by overcapacity of wood boards production together with big debt repayment burden of Belarusian wood mills.

Table 25 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	1 599	1 760	1 840	2 207
Revenue, million dollars	839,1	890,2	1045,3	1066,2
Share in overall revenue, %	0,5%	0,5%	0,5%	0,6%
Share of micro and small enterprises in revenue, %	34,2%	36,2%	37,8%	37,9%
Net profit, million dollars	84,45	50,12	31,28	19,67
Taxes, mln \$		65,7	61,8	60,2
Revenue per employee, thou \$	23 012	26 357	31 680	34 337
Number of enterprises reported losses	8	12	16	16

35.5 thou of employees are working in wood processing industry (1.2% of all people employed in the economy). Nominal wage in this industry has always been below the average nominal salary in Belarus. At present, it accounts for 340 dollars.

Table 26 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	1,3%	1,3%	1,2%	1,2%	-
Nominal wage, \$	261,7	330,6	437,6	464,3	340,9

Wood processing in industry takes the 7th place in term of innovation activities. The ration of innovation expenditures to revenue was about 2.2% in 2014.

Table 27 Innovation activity

Indicator	2014
Number of enterprises involved in innovation	14
Expenditure on innovation activities, \$ thou	14815
The ratio of innovation expenditures to revenue	2.2%

Conclusion

Belarus has **considerable forest resources** which forms a fundamental for development of wood-working industry. Currently the annual wood increase in Belarus is estimated at the level of 29 mn cu m, while the volume of felling is about 18 mn cu m which is ca. 70% of allowed forest utilization volume. In contract to Russia, Belarus is more compact and has better forest access. At the same time forests are managed by state-owned forestries and there is certain potential for operations improvement in forest management.

The state also controls the majority of wood-processing companies. Until recently the biggest woodworking companies had physically and morally outdated assets and suffered from inefficiencies. The large amounts of forest resources were exported without or with very limited depth of processing. Initiated in 2007 upgrade of major woodworking companies into modern wood mills was almost completed in 2015, The ambitious investment programme cost more than 1 bn EUR and was financed with state support by Belarusian banks. Despite certain inefficiencies in investment process (poor planning, contract management, schedule and budget overruns) the companies were equipped with state-of-the art production lines. The modernized companies produce: MDF, HDF, insulation MDF, particle boards, melamine-faced flooring, plywood, furniture boards, etc.

Foreign investors also entered Belarusian wood-working industry in early 2010s. In 2010 Kronospan signed an Investment agreement with the Republic of Belarus. The investment costs for setting up wood board manufacturing are estimated at 120 million euros. In 2013 Kronospan began the

construction of the second plant on the territory of Free Economic Zone "Mogilev". The project is supported by EBRD loans. In 2011 VMG group invested into a Greenfield integrated wood processing complex in Free Economic Zone "Mogilev". The complex consists of particle board plant, flat line production, layer glued production, co-generational power plant and resins production. EBRD supported the project with €26.00 million loan.

The wood boards overcapacity and overall economic downturn on Russian market put great pressure on prices. In view of big debt burden and higher energy costs compared to Russian producers modernized Belarusian state-owned wood mills experience difficulties with exporting their boards into Russia. Moreover, operational inefficiencies (labor organization, product mix, marketing, management, etc.) of Belarusian undermine the competitiveness of Belarusian state-owned companies on foreign markets, incl. EU.

In contrast to particle wood boards segment, the solid wood panels business is not so developed in Belarus. Large quantities of harvested timber are processed in low value added products such as firewood. The lower quality wood could be processed by wood mills and pulp mill in Svetlogorsk, while utilization of high quality wood represent good potential for investments.

Taking into account all this information there are two perspective directions for investing in Belarusian wood-processing industry:

- Investments in existing state-owned wood mills associated with restructuring of their debts and certain operational improvements
- Investments in solid wood production associated with improvements in forest management and harvesting operations and getting certain guarantees with regard to long-term access to wood resources.

Manufacture of paper and paper products

Share in GDP, 2013	0,5%
Share in export, 2014	0,6%
Share in revenues, 2014	0,6%
Share in number of employees, 2014	1,0%

Paper and paper products industry is among the smallest sectors in Belarus alongside with leather and foot industry. It accounts for 1.5% of industrial output and around 0.5% of GDP.

Almost all paper products manufactured in Belarus are consumed within the country. The export is quite low and amounts for 232 million dollars. Due to the low quality of domestic raw materials, the import level of paper products is relatively high and accounts for 1.9% of total Belarusian imports of goods.

Table 28 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	0.7	0.5	0.5	-	-
Share in export, %	0,6%	0,5%	0,6%	0,6%	-
Share in import, %	1,4%	1,4%	1,7%	1,9%	-
Share in production volume, %	1,62%	1,45%	1,58%	1,50%	1,50%
Production volume, million dollars	1 007,16	1 065,51	1 066,09	986,73	667,40
Share in capital investments, %	0,6%	0,9%	1,2%	2,9%	-

Paper manufacturing accounts for 0,6% of total revenue in Belarus. The sector is not large, although totals more than 1,2 thou companies. The aggregated revenue of the industry has remained within 1.1-1.2 billion dollars and has not shown any dramatic increases or downfalls recently.

The largest paper manufacturer in Belarus is JSC "Svetlogorsk Pulp and Board Plant". As of 2014, its revenue totaled 81,5 million dollars. The company focuses on corrugated board, fluting, paper bags, sawn timber and honeycomb. The company suffered losses of 22 million dollars in 2014.

Other companies are mostly engaged in production of wallpapers, paper packaging and copying and publishing business.

Table 29 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	1 126	1 125	1 137	1 257
Revenue, million dollars	1176,3	1295,0	1326,8	1226,1
Share in overall revenue, %	0,7%	0,7%	0,7%	0,6%
Share of micro and small enterprises in revenue, %	37,1%	35,1%	38,3%	38,7%
Net profit, million dollars	139,60	90,88	71,86	44,64
Taxes, mln \$		119,3	117,0	108,1
Revenue per employee, thou \$	35 213	40 025	42 916	41 744
Number of enterprises reported losses	19	11	18	18

Net profit has been declining in paper industry alongside with mining industry, textile and leather industries, etc. The industry needs more investment so as to be more competitive and increase the share of exported products within the sector of paper manufacturing.

Table 30 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	1,0%	1,1%	1,0%	1,0%	
Nominal wage, \$	341,5	434,7	551,1	573,2	422,5

Despite the declining net profit, the nominal wages across the industry are slightly above average. The revenue per employee in paper industry is higher than in wood processing, textile, leather and construction sectors, fishing and a few other sectors. Nowadays, expenditures on innovations in paper industry is around 10 million dollars or 1.4% of the revenues.

Table 31 Innovation activity

Indicator	2014
Number of enterprises involved in innovation	6
Expenditure on innovation activities, \$ thou	10 406
The ratio of innovation expenditures to revenue	1,4%

Conclusion

Belarusian pulp and paper industry is represented by one pulp mill in Svetlogorsk, a number of state-owned paper plants and a big quantity of state and private companies engaged in production of paper packaging, publishing, printing and copying.

Svetlogorsk Pulp and Board Plant is currently implementing one of the largest investment projects with the total amount of investments of more than 800 million dollars. The main aim of the project is to build a plant for production of bleached sulfite (the construction started in 2013). Total production volume is expected at the level of 400 thou tons. The project is financed by Chinese tied loan and implemented by Chinese company SINOMACH (subsidiary of SINOMACH – CAMCE. The project is aimed at reducing imports of high-quality bleached pulp for Belarusian paper industry.

The investments into pulp and paper sector of Belarus may be associated with debt restructuring of Svetlogorsk Pulp and Board Plant and introduction of operational improvements of the modernized capacities.

Manufacture of coke and oil products

Share in GDP, 2013	1,2%
Share in export, 2014	29,3%
Share in revenues, 2014	4,2%
Share in number of employees, 2014	0,6%

With hardly any oil resources inside the country, Belarus actively refines crude oil and exports oil products to European Union and other countries. In terms of the volume of crude oil processing Belarus is on an equal level with countries such as Hungary, Austria, Croatia where about 22 million ton of oil is refined. Belarusian oil refineries use Russian oil as their raw material.

In terms of production volumes, manufacture of coke and refined petroleum products industry was the 2nd largest producers with around 7,4 billion dollars. However, in 2013 its share in GDP amounted only to 1,2%. From 2013 share in capital investments to the industry keeps on growing, and totaled to 2,9% in 2014.

Oil products are one of the main exports of Belarus, which amount to about 29,3% of total flow of exports. In 2012 export of oil products reached their highest level in 6 years and amounted to 17,5 million ton, but dropped by about 23,3% down to 13,8 million ton in 2014. During the first eight month of 2015, export of oil products increased by 21% up to 11,4 million ton, compared to the same period of the last year. However, in terms of value, export decreased by 31% down to 4 891 million USD. In 2014 oil production export structure was as follows: Ukraine - 25%, UK - 25%, the Netherlands - 17%, Russia - 13%, Italy - 11%, Lithuania - 3%.

Until 2010 import of oil products traditionally stood at level of 1-3 million ton. In 2011-2012 import started to increase, reaching 8.5 million ton in 2012. However, due to Russia's demand of Belarus to stop the export of oil products under cover of solvents and thinners, in 2013 the figure dropped sharply to 0.1 million ton. In 2014, import of oil products amounted to 0.4 million ton.

The main governing body of the industry is the state-run concern "Belneftekhim", which regulates and controls almost all the petrochemical and chemical enterprises. The two key players in the oil refining industry are OJSC Mozyr (3 209 million dollars revenue in 2014, 2 067 million dollars revenue – three

quarters of 2015) and OJSC Naftan (3 430 million dollars revenue in 2014, 2 265 million dollars revenue – three quarters of 2015).

Table 32 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	1.6	2.3	1.2	-	-
Share in export, %	31,2%	32,1%	28,1%	29,3%	-
Share in import, %	8,5%	11,9%	1,4%	1,4%	-
Share in production volume, %	21,16%	20,55%	15,82%	16,26%	16,47%
Production volume, \$ mln	13 121,49	15 120,60	10 681,01	10 679,64	7 386,08
Share in capital investments, %	2,3%	1,9%	2,3%	2,9%	-

By the share in overall revenue, manufacture of coke and refined oil products is the top-7 largest, with 4,2%. The industry is represented only by large and average enterprises.

It is worthy of note that representing only 1,2% of GDP share the industry is the 5th largest taxpayers in the country.

Manufacture of coke and refined oil products industry didn't have any unprofitable enterprise in 2014. As of revenue per employee, the industry shows the largest revenue earned per employee.

Table 33 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	29	31	30	56
Revenue, \$ mln	7917,1	11186,7	9244,0	8050,9
Share in overall revenue, %	4,8%	6,0%	4,7%	4,2%
Share of micro and small enterprises in revenue, %	0,0%	0,0%	0,0%	0,0%
Net profit, \$ mln	730,32	1 508,03	492,95	734,44
Taxes, mln \$		1 160,7	1 271,5	1 442,2
Revenue per employee, \$	470,19	624,92	519,99	481,17
Number of enterprises reported losses	1	1	0	0

The share of average number of people employed in manufacturing of coke and refined oil products industry is constant over the time and is the lowest among all the represented industries. However,

manufacturing of coke and refined oil products industry offers the highest nominal wage among the other industries.

Table 34 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	0,6%	0,6%	0,6%	0,6%	
Nominal wage, \$	667,9	875,5	1 040,0	1 046,3	767,4

One of the most vital tasks for the enterprises of the oil industry of Belarus is strengthening market positions by improving product quality to meet the European standards. So, a number of major projects, including the modernization and the increase of the efficiency of Belarusian oil refineries are implemented. In 2014 the industry had 6 enterprises that were involved in innovation. The contribution amount totaled to around 309 million dollars, which was the 3rd largest among other industries.

Table 35 Innovation activity

Indicator	2014
Number of enterprises involved in innovation	6
Expenditure on innovation activities, \$ thou	309 225
The ratio of innovation expenditures to revenue	3,8%

Conclusion

In Belarus, manufacture of coke and oil products is one of the **basic industries providing around 30% of the export**. The industry is characterized by the following main aspects:

- **Oil products** are one of the main exports of Belarus, which amount to about 10.6 billion dollars of export revenues.
- Belarusian export of oil products is quite diverse: the products are supplied to more than 40 countries.
- Belarusian oil refinery sector **is represented by two enterprises** – OJSC Mozyr Oil Refinery and OJSC Naftan. These two enterprises are mainly producing the following three types of oil products: diesel oil (DO), fuel and residual oil.
- **The state dominates the industry**: OJSC Naftan is 100% state-owned enterprise; OJSC Mozyr Oil Refinery is partly private (Russian capital).
- Oil refining capacity of two Belarusian plants is around 23 million tons.
- In Belarus, **oil refining depth** is up to **75%** that is in average **much higher than in Russia**.



- **Russia is the main and the only oil provider to Belarus.** Belarusian oil refineries use Russian oil as their raw material, agreements on production volumes are made annually in the Balance of Oil and petroleum products between Belarusian and Russian Governments.

To be competitive in a world market Belarusian oil refineries' facilities **need to be constantly renovated**. So, last few years **a lot of investment projects were implemented** and the process still continues. Modernization and reconstruction of oil refining industry is conducted on a constant level. Large investment projects such as

- delayed coking unit (around 1,5 billion USD) at Naftan
- reconstruction of crude oil distillation unit AT-8 (around 260 mln. USD) at Naftan
- complex of hydro cracking of heavy oil residues (around 1,5 billion USD) at Mozyr
- production of high- octane gas components (around 280 mln. USD) at Mozyr
- and other projects

are now on different stages of implementation and are critical to the oil refineries from strategic perspective.

However, the slowdown in implementation of investment projects can arise because of **the lack of own financing along with reduction of world oil prices**. According to the World Bank, OPEC, etc. forecasts, world oil prices are expected to recover in coming years, which should have a positive effect on the financials of Belarusian oil refineries, allowing them to expand their investment activities.

Thus, the investment activity in oil refining industry will be closely connected with completion of the key projects listed above. The implementation of these projects step in a critical stage in coming years. So it is likely that oil refineries will find resources (own and loans) for their completion.

Chemical industry

Share in GDP, 2013	3,2%
Share in export, 2014	11,8%
Share in revenues, 2014	3,4%
Share in number of employees, 2014	2,0%

Belarus has the **most powerful chemical industry** among FSU states besides Russia. Belarusian chemical industry specializes first of all in processing synthetic polymers, mineral fertilizers, fibers and yarns, pharmaceuticals, household chemical products. The chemical and petrochemical sector is one of the most important in the Belarusian economy, accounting for **11.5% of industrial production**. However, there was a serious decline in production volumes in recent years that results in decrease of contribution to GDP from 6.4% in 2011 to 3.2% in 2013.

Chemical industry is also an important source of foreign currency inflow, as about 12% of all Belarusian accounts for the chemical sector. During the last 30 years Belarus has been **one of the 5 largest countries** producing potash fertilizers in the world. Fertilizers amount up to 70% of total chemical exports.

Chemical industry's imports total around 7.8% of Belarusian imports of goods. Chemicals import structure is quite diverse. The biggest part is taken by pharmaceuticals – one of the most crucial articles of chemical imports – 26%. Then goes organic chemicals – 21% in 2014. Products of inorganic chemistry accounts for 8.3%.

Table 36 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	6.4	5.4	3.2	-	-
Share in export, %	15,9%	16,5%	9,0%	11,8%	-
Share in import, %	6,3%	6,5%	7,3%	7,8%	-
Share in production volume, %	11,48%	11,84%	7,68%	9,87%	11,5%
Production volume, million dollars	7 119,90	8 709,62	5 186,57	6 483,61	5 159,2
Share in capital investments, %	5,7%	4,9%	3,0%	2,7%	-

Chemistry industry consists of more than **500 enterprises**. This industry is **heavily dominated by the state**, with the vast majority of enterprises being in government ownership. Most of chemicals and

petrochemicals production is overseen by Belneftekhim (excluding pharmaceuticals), a state-run control body comprising the majority of chemical and petrochemical enterprises.

Key chemical manufacturers are:

- OJSC "Belaruskali" – one of the leading producer of potash fertilizers in the world – 1/7 of overall world production volumes (2 751 million dollars revenue in 2014, 1 846 million dollars revenue – three quarters of 2015);
- OJSC "MogilevKhimvolokno" – the largest chemical yarns and fibers producer (518 million dollars revenue in 2014, 298 million dollars revenue – three quarters of 2015);
- Plant «Polymir» of OJSC «Naftan» – produces low-density polyethylene, acrylic fibers, organic synthesis products, hydrocarbon cuts, etc.;
- OJSC "Grodno Azot" – largest chemical enterprises of the country forming a basis of petrochemical complex. It produces liquid ammonia for technical use; urea; ammonium sulphate; methanol for technical use, etc. (1 006 million dollars revenue in 2014, 619 million dollars revenue – three quarters of 2015);
- PTC «Khimvolokno» JSC «Grodno Azot» (large manufacturer of nylon and polyester yarns and fibers, as well as polyamide 6 (PA 6) in primary forms and PA 6-based composite materials, including: nylon light&heat-stabilized yarn, also spun-dyed);
- OJSC "SvetlogorskKhimvolokno" – (159 million dollars revenue in 2014, 89 million dollars revenue – three quarters of 2015).

Revenues as well as **net profit** in chemical industry **has been decreasing** over the last four years (by 31% and 37%, correspondingly). AS a result, chemical industry lost its positions in comparison with other sectors: the share of revenue has dropped by 2.4 p.p. and the share of net profit has dropped by 3.3 p.p.

Table 37 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	443	472	479	538
Revenue, million dollars	9514,9	8439,8	6263,2	6552,6
Share in overall revenue, %	5,8%	4,5%	3,2%	3,4%
Share of micro and small enterprises in revenue, %	15,2%	11,1%	9,4%	7,3%
Net profit, million dollars	2 282,39	1 749,62	770,21	1 435,38
Taxes, mln \$		1 065,2	871,8	384,7
Revenue per employee, \$	134 966	124 819	97 458	114 901
Number of enterprises reported losses	5	6	9	8

There are 61 thou employees working in chemical industry. It accounts for 2% of employees engaged in the economy (6th place among all industries by number of people employed). Chemical industry takes the **second place** in terms of amount of **nominal wages** - it is about 720 dollars.

Table 38 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	2,2%	2,2%	2,2%	2,0%	-
Nominal wage, \$	605,1	711,7	815,3	893,4	722,7

Table 39 Innovation activity

Indicator	2014
Number of enterprises involved in innovation	33
Expenditure on innovation activities, \$ thou	18318
The ratio of innovation expenditures to revenue	0,3%

Pharmaceutical industry

Belarusian pharmaceutical industry shows a healthy growth:

- Pharmaceutical market in 2014 was worth more than 1 billion dollars (+5,6%, compared to 2013). Over the last 8 years, Belarusian pharmaceutical market has had an upward trend, growing around 13% annually and outperforming GDP growth significantly. However, we expect the market to shrink by ca. 10% in 2015 due to sharp drop in imports of pharmaceuticals (-23% during January-December 2015). Russian pharmaceutical market is estimated at about 30 billion dollars; in Kazakhstan this market is worth 1.9 billion dollars.
- The production of medicines had grown by 32% during 2011-2014 and reached 487 million dollars. Positive figures extended to 2015: preliminary data show that during January-December 2015 the production went up by 38,5% in comparable prices which can be explained by the completed investment projects at state-owned pharmaceutical companies.
- Per capita expenditures on pharmaceuticals had been growing by 10% annually and amounted to 71 dollars in 2014. That being said, per capita expenditures on pharmaceuticals in Belarus do not exceed that of Russia (77 dollars in 2014).
- The share of per capita expenditures on pharmaceuticals in overall consumer expenditures rose as well (from 2,2% to 2,5%).
- Over the last 5 years, the per capita consumption of pharmaceuticals has grown by 200% in value terms (up to 113 dollars). The consumption of pharmaceuticals is quite high, leaving behind all the CIS countries except Russia (in Kazakhstan and Azerbaijan the pharmaceuticals

consumption is 60-70 dollars per capita). However, Europeans consume 200% more pharmaceuticals than Belarusians.

There are **about 30 enterprises** in the pharmaceutical industry – 5 of them are with equity participation from the state. However, **the state-owned enterprises account for 70-75% of the overall pharmaceuticals production volume**. The largest state-owned enterprises are RUE “Belmedpreparaty” and OJSC “Borimed”. Thus, the pharmaceuticals production is mainly concentrated among the state-owned enterprises. The private sector is broadly represented in retail and wholesaling.

Belarusian pharmaceutical industry is characterized by price differentiation: the domestic producers belong to the low-end market and middle-market, while foreign producers operate in the premium market. As a result, there is a big price spread. That said, the average price of Belarusian pharmaceuticals is 1,36 dollars (in wholesale prices), the average price of foreign ones – 4,42 dollars (in wholesale prices). Thus, there is a 260% difference.

Belarusian pharmaceutical industry (in terms of value) has been always characterized by the big share of imported pharmaceuticals. That said, according to Intellix, foreign producers accounted for 76% of the market. In 2014, Belarus imported pharmaceuticals worth 817 million dollars (579 million dollars accounted for medicines) (CARG = 14% в 2004-2014). In order to decrease dependence on imported pharmaceuticals and increase domestic production, the Republic of Belarus adopted a new programme, which aimed at gaining 50% of the market share in terms of value. It is worthy of note that in physical terms Belarusian products gained the share of 50% a long time ago. To achieve the above mentioned goal, the Ministry of Health **implements a series of investment projects** and takes administrative measures intended to reduce imports and prop up domestic consumption.

In contrast to imports, **the pharmaceutical exports volumes are much lower**. (162 million dollars in 2014). The state-owned companies account for 90% of exports. The geographical structure of exports shows a dominant presence of the EEU (85%). The CIS accounts for 90% of Belarusian pharmaceuticals exports. **Low price and mass market specialization are among competitive advantages** of the domestic producers.

The main problem faced by the majority of Belarusian companies is **the lack of internationally accepted GMP certificate** required by the EU and the USA. (At the moment, only one production site at RUE “Belmedpreparaty” and a few private companies have the internationally recognized certificates). Creation of common pharma market of EAEU since 1 January 2016 led to the fact that from April 2015 on the Belarusian producers of pharmaceuticals are obliged to be in compliance with national requirements of GMP which will allow them to export to EAEU without additional registration requirements.

Investment activity in Belarusian pharmaceutical industry is associated with the following:

- Financing of the state-owned companies and granting of loans subsidized by the state.;
- Implementation of single investment projects by private companies;

- Lack of big international companies;
- Implementation of mainly small projects amounting to 50 million dollars.

According to the Presidential Decree №174 of the Republic of Belarus, the state-owned companies will be provided with the funds worth 157 million dollars, preferential taxation on a number of investment projects and financing of the acquisition of intellectual right as well as drug submission. Additionally, the Decree does not stipulate 10 investment projects worth 40 million dollar that are to be implemented in the near future.

Among the biggest investment projects implemented by the state-owned companies are installment of a new production line worth 25 million dollars by OJSC "Borimed".

In the private sector, the following projects were implemented recently:

- In May 2014, Joint LLC "Lekfarm", was sold to Rompharm Company (Bulgary), one of the founders with a share of 40%. The transaction amount (51% of shares) was not disclosed.
- In January 2016, JC "Nativita" (Russia, India, Lithuania) plans to initiate the construction of facilities for the production of the first biotechnological generics (cancer and chemotherapy drugs) in Beshankovichi, Brest Region. The investment amounts to 10 million dollars.

Conclusion

Chemical sector is one of the major sectors in Belarus, accounting for around 10% of the manufacturing industry and amounting to 6,5 billion USD of industrial output in 2014.

- In Belarus, **almost all major chemical enterprises are controlled by the state**. Belaruskali, Grodno Azot and Gomel Chemical Plant are the main three fertilizer manufactures, in which the state owns 99%. Fibers and polymer production are represented by Mogilevkhimvolokno, Polymir JSC "Naftan", SvetlogorskHimvolokno, and almost are entirely owned by the Republic of Belarus.
- **Belarusian chemical industry is export-oriented**: in 2014, the share of chemical industry reached almost 12% of exports.
- **Mineral fertilizers are the most important branch of the chemical industry**. Belarus is one of the few countries in the world, which produces all three main types of fertilizer - nitrogen, potash and phosphate.
- **Belarus has a developed industry of chemical fibers and threads**. For certain types of products (polyester fiber and threads, acrylic fibers, viscose cord fabrics) Belarus is a **monopolist in the CIS markets**.

Chemical and petrochemical industry has been subsidized by the oil refinery industry via providing basic raw material at lower prices or merge with oil refineries (as Polimir was joined to Naftan). The plants were constructed in Soviet times and now has a very outdated and energy consuming technology and equipment. The industry haven't accumulated enough resources for major

modernization. There have been no large investment projects in Chemical and Petrochemical industry during the last years. Large projects that were announced in the industry are listed below (from highest probability to lowest):

- Development and production of all-steel radial tires with rim diameter 57" and 63" (306,7 mln. USD) at Belshina. 2013-2017
- Organization of Viscose Staple Fiber production (308,1 mln. USD) at Svetlogorskhimvolokno
- Construction of nitrogen complex (estimated at about 1,5 billion USD) at Grodno Azot. Should be finished in 2022.

The future investments will greatly depend on availability of external financing such as Chinese tied loans or investors' financing, especially from such investors who have access to raw materials (like gas for Grodno Azot) or markets (as in the case for Gomel Chemical Plant). Single projects with low cost and acceptable payback are possible in case of investors' interest.

One of the most attractive sectors for investments may be pharmaceutical industry. Due to strong production traditions and high qualified workforce, and considering access to sizeable domestic markets of Russia and Kazakhstan (consumption of more than 30 bn USD per year), the implementation of the large scale investment projects may bring attractive level of investment returns.

Manufacture of rubber and plastic products

Share in GDP, 2013	1,2%
Share in export, 2014	4,3%
Share in revenues, 2014	1,3%
Share in number of employees, 2014	1,4%

Manufacture of rubber and plastic products accounts for 3,5% of the country's production volume, which dropped back to the level of 2011 after a significant increase in 2012-2013.

Although the industry's contribution into GDP is around 1,2%, its share in export is more than 4%. At the same time plastic and rubber goods are the most imported products within chemical industry.

The level of capital investment into manufacturing of rubber and plastic products is comparable with textile and mining industries, manufacturing of machinery and equipment, accommodation and restaurant activities.

Table 40 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	1.1	1.1	1.2	-	-
Share in export, %	3,8%	4,0%	4,9%	4,3%	-
Share in import, %	4,8%	5,4%	5,8%	5,7%	-
Share in production volume, %	3,61%	3,67%	4,04%	3,47%	3,18%
Production volume, million dollars	2 237,84	2 702,84	2 727,21	2 277,64	1 424,13
Share in capital investments, %	0,9%	0,9%	0,8%	1,2%	-

There are more than 1.4 thou companies engaged in rubber and plastic products production. The most important enterprise is JSC "Belshina". Its revenue amounts to 632 million dollars. The largest producers of plastic goods are OJSC "Borisov Plastic Products Plant", JSC "Borisov Plant of Plastic Packaging "Polimiz" and OJSC "Invet" with aggregated revenue of 64 million dollars.

The industry's revenue decreased by ca. 15% in 2014. Alongside fell the index of revenue per employee, which returned to the level of 2011. Net profit has declined dramatically since 2011 majorly because of the huge losses in 2014.

Table 41 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	1 161	1 178	1 268	1 428
Revenue, million dollars	2489,7	2820,8	2812,0	2392,4
Share in overall revenue, %	1,5%	1,5%	1,4%	1,3%
Share of micro and small enterprises in revenue, %	33,2%	34,0%	33,4%	36,6%
Net profit, million dollars	365,56	332,20	273,48	88,28
Taxes, mln \$	153,8	146,0	133,9	153,8
Revenue per employee, \$	60 187	70 887	72 321	60 681
Number of enterprises reported losses	1	1	4	14

Despite the decrease in profit and revenue, the nominal wage is above average in Belarus and is similar to nominal wages in paper manufacturing industry, electronic equipment manufacturing, wholesale and trade. Rubber and plastic industry hires around 1.4% of all employees.

Table 42 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	1,5%	1,4%	1,5%	1,4%	-
Nominal wage, \$	374,0	506,8	592,0	580,2	434,2

Table 43 Innovation activity

Indicator	2014
Number of enterprises involved in innovation	9
Expenditure on innovation activities, \$ thou	11804
The ratio of innovation expenditures to revenue	0,8%

Conclusion

The rubber and plastics industry in Belarus is based on the developed petrochemical industry sourced by oil refineries. The largest company in the industry generating ca. 25-30% of all revenues in the industry is state-owned OJSC "Belshina" which produces tires for trucks and light vehicles. More than half of produced tires is exported mainly to Russia and CIS. Belshina faces certain difficulties in competing with Asian tires manufacturers on CIS market due to its dependency on imported caoutchouc and higher environment standards. Further development of Belshina is associated with an investment project for production of large tires for mining trucks which is planned to be completed in late 2016.

The investment opportunities of the rubber and plastics industry may be associated with creation of joint ventures with world leaders in tires manufacturing in order to be integrated in European supply chains.

Another area for investments could be establishing of import-substituting production of mass plastic products such as pipes, fittings, construction materials, medical consumables, goods for children, etc.

Manufacture of other non-metallic mineral products

Share in GDP, 2013	2,0%
Share in export, 2014	2,2%
Share in revenues, 2014	1, %
Share in number of employees, 2014	2,0%

Manufacture of other non-metallic mineral products includes mainly the production of various **construction materials**. The industry is specialized in production of **cement, lime, cladding and finishing materials, precast concrete and concrete structures, roofing materials, glass**. It produces more than 130 kinds of building materials and products.

The Republic of Belarus is trying to develop the export of building materials, but the dynamics of five years reflects a slight increase in the share of exports from 1.5% in 2011 to 2.4% in 2014. The production volume fell sharply to \$ 1.96 billion in 2015 in comparison with \$3.65 billion in 2014. The dynamics of the main macroeconomic indicators of the mentioned industry is largely caused by trends in the building industry.

The share of capital investments decreased significantly from 6.3% to 1.4% during the period from 2011 to 2014 due to completion of major investment projects at Belarusian cement plants, float glass plant and crushed stone plant.

Table 44 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	1.4	1.7	2.0	-	-
Share in export, %	1,5%	1,6%	2,2%	2,2%	-
Share in import, %	1,0%	1,2%	1,5%	1,5%	-
Share in production volume, %	4,23%	4,42%	5,52%	5,55%	4,37%
Production volume, \$ billion	2,62	3,25	3,72	3,65	1,96
Share in capital investments, %	6,3%	3,9%	1,6%	1,4%	-

Manufacture of other non-metallic mineral products consists of more than **1250 enterprises**: its number has increased by 20% in recent years. And also increased the number of unprofitable enterprises (up to 49 in 2014)

Key suppliers on market are the following:

- OJSC "Krasnoselskstroyaterialy" - cement producer
- OJSC "Krichevcementnoshifer" – cement producer
- OJSC "Belarusian Cement Plant" - cement producer
- RUPE "Granit" – largest crushed stone and macadam producer
- JSC "Keramin"- the most famous manufacturer of tiles in the Republic of Belarus
- OJSC "Beriozastroymaterialy" – producer of ceramic tiles
- JSC "Gomelglass"-the manufacturer of window glass

Table 45 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	1 036	1 020	1 113	1 284
Revenue, \$ mln	2 169,03	2 519,51	2 723,49	2 288,03
Share in overall revenue, %	1,86%	1,83%	1,92%	1,65%
Share of micro and small enterprises in revenue, %	14,5%	14,8%	17,2%	15,2%
Net profit, \$ mln	184,82	163,73	156,53	94,28
Taxes, \$ mln	-	368,5	382,5	318,7
Revenue per employee, \$	39 726	48 903	53 773	47 582
Number of enterprises reported losses	22	24	42	49

The industry hires about 58.9 thou employees that accounts for 2,0% of total number of people employed in the economy. Nominal wages in the industry has always been quite high. In 2013-2014 years nominal wages reached up to 610 dollars. At present, salaries have sharply dropped down to the amount of 400 dollars.

Table 46 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	2,1%	2,1%	2,0%	2,0%	-
Nominal wage, \$	344,9	465,1	611,8	606,9	399,7

30 companies of 1,200 involved in the innovation process. Expenditure on innovation activities amounts to 58900 thou dollars.

Table 47 Innovation activity

Indicator	2014
Number of enterprises involved in innovation	30
Expenditure on innovation activities, \$ thou	58 866
The ratio of innovation expenditures to revenue	2,6%

Recent investment projects in manufacture of other non-metallic mineral products:

- 1) In 2005-2010, investment in the construction sector amounted to \$ 1 billion. The bulk of the funds have been mastered in the expansion projects of production of ceramic tiles, cement, and crushed granite. In 2012-2013 cement factories introduced three production lines with a total capacity of 5.4 million tons of cement per year. In May 2012, it was introduced a new line on the «Krasnoselskstroyaterialy» , in July, 2012 - on the RUE "Belarusian Cement Plant", in June 2013 - on the PRUE "Krichevceementnoshifer".
- 2) Doubling the capacity of the production of float glass up to 34 million square meters per year in the enterprise «Gomelsteklo» .
- 3) Extension of capacities on RUE "Granit".

Conclusion

The construction materials industry's development is closely connected with the development of construction sector of Belarus. During 2000s the government strategy was stimulating economy through construction of residential housing and other objects. Following construction boom large investments were channeled in the building materials industry: such as doubling of capacities of three cement plants worth 1,3 bn USD (Chinese financing backed by the government guarantees and support), construction of floating glass line at Gomelsteklo, enhancing capacities of crushed stone enterprise Granit, modernization of reinforced concrete plants, etc.

In recent years the exports of cement reached 1,5 – 1,7 mn t. However, there are limitations on exporting heavy construction materials on long distances. Moreover, due to higher energy costs compared to Russian companies, Belarusian cement is less competitive on Russian market.

In this respect the possible investments into the building materials industry may be associated with the introduction of energy-saving technologies, use the alternative energy sources such as waste, production of high value added products, investments in building vertically integrated businesses to manage the costs in more efficient way.

Metallurgy industry

Share in GDP, 2013	1,6%
Share in export, 2014	6,5%
Share in revenues, 2014	2,2%
Share in number of employees, 2014	2,2%

Metallurgy and metalworking industry of the Republic of Belarus plays an important role in the economy serving as a basis for development of machinery and equipment, construction, transportation and public utilities sectors.

Belarusian metallurgical industry is represented by the enterprises of ferrous metallurgy (steelmakers), scrap metals operators, enterprises of powder metallurgy and enterprises of non-ferrous metallurgy. At the moment there are no ore mining companies as well as primary metallurgical production companies (smelting from natural ores) in the metallurgical industry of the Republic of Belarus. Technological processes are based on metal conversion, i.e. the raw materials for Belarusian metallurgical industry are domestic and imported scrap, iron and steel feeds.

Metallurgy accounts for 6% of production volumes (6.8% of total manufacturing output) of the Republic of Belarus and is **ranked 6th** after food industry, refinery, chemical, electricity, gas and water production and supply and machinery industries. The share of metallurgy industry in domestic gross products accounted for 1.6% (has decreased by 0.7 p.p. between 2011-2013).

The contribution of metallurgy industry into the Belarusian export accounts for about 6.5%. Belarusian metallurgical products **hold leading positions** on the Baltic States markets, are well-known among European countries (Germany, Italy etc.) and Middle East. Main export positions of Belarusian basic metals industry are bars, rods and semi-finished products of iron and non-alloy steel, steel pipes, wire of iron and steel, stoves of iron and steel, metalware, insulation panels.

Being fully dependent on the imported raw materials for metallurgical production Belarus has to import large quantities of metallurgical primary from Russia. Moreover, Belarus lacks production capacities in flat-roll steel, steel pipes, insulation panels, railway construction materials, cast articles of iron and steel for engine production and a number of other products of basic metals. So, the share of metallurgy industry in total Belarusian imports reaches 9-10%.

Table 48 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	2.3	1.8	1.6	-	-
Share in export, %	6,0%	5,5%	6,3%	6,5%	-
Share in import, %	10,0%	10,0%	10,6%	9,1%	-
Share in production volume, %	6,85%	6,61%	6,75%	6,41%	6,0%
Production volume, million dollars	4 250,92	4 866,48	4 555,87	4 208,11	2 704,00
Share in capital investments, %	1,1%	1,3%	2,3%	2,5%	-

Despite the fact that there are more than 2 000 of enterprises, Belarusian metallurgy industry is highly concentrated. Key suppliers on market are the following:

- OJSC "BMZ" - flagship enterprise of Belarusian heavy industry being one of the largest metallurgical enterprises of its kind in Europe. It produces steel, steel pipes, steel cord, bead wire, RML wire, steel wire. In 2015, JSC "BMZ" produced around 5 mln tons of products (1 484 million dollars revenue in 2014, 842 million dollars revenue – three quarters of 2015);.
- OJSC "Mogilev metallurgical works" - a major company producing metallurgical goods: steel pipes – electric welded, longitudinally welded, shaped, for gas/water supply, shapes for building structures, etc (43.9 million dollars revenue in 2014, 25.7 million dollars revenue – three quarters of 2015);.
- JSC "Gomel foundry plant "Tsentrolit" is the largest enterprise in Belarus which specializes in the production of grey and ductile iron castings (30.7 million dollars revenue in 2014, 14.1 million dollars revenue – three quarters of 2015);
- Rechitskiy metizny zavod was among the first enterprises in metallurgical industry appeared in Belarus, founded in 1912. The plant specializes in production of special kinds of nails which enables it to be competitive in the markets of almost all European countries. The company's product range comprises of nails, screws, rivets, splint pins, axels, wires.

A Belarusian steel plant holding includes 15 metallurgy plants.

Belarusian metallurgy industry generates around 4.2 billion dollars revenues or 2.2% of all revenues in the country. As well as production volumes, revenues has decreased in 2014 (-12.4% in comparison with 2013). Moreover, there was a sharp decline in net profit from 2.3 billion dollars in 2011 to 1.4 billion dollars in 2014.

Table 49 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	1 664	1 754	1 866	2 141
Revenue, million dollars	4212,1	4732,4	4775,4	4184,7
Share in overall revenue, %	2,6%	2,5%	2,5%	2,2%

Share of micro and small enterprises in revenue, %	21,0%	22,3%	23,8%	24,2%
Net profit, million dollars	2 282,39	1 749,62	770,21	1 435,38
Taxes, mln \$	-	293,7	312,2	229,7
Number of enterprises reported losses	7	9	29	53

There are more than 66 thousand people working in metallurgy industry. Nominal wage in the industry account for about 450 dollars in 2015 (655 dollars in 2014). Metallurgy industry is in the TOP-10 industries with highest level of labor productivity - revenue per employee.

Table 50 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	2.1%	2.2%	2,3%	2,2%	-
Nominal wage, \$	434,9	550,9	657,9	655,5	447,8

Metallurgy industry **tops the list** of industries by ratio of **innovation expenditures to revenue**. This figure accounted for 4.5% in 2014.

Table 51 Innovation activity

Indicator	2014
Number of enterprises involved in innovation	31
Expenditure on innovation activities, \$ thou	153 811
The ratio of innovation expenditures to revenue	4,8%

Conclusion

There are no metal ores deposits in Belarus, therefore, Belarus has to import large quantities of ferrous and non-ferrous metal scrap and other raw materials for metallurgical and metalworking production. **Due to specifics of the industry (commodity product) there is certain price volatility for raw materials and exposure to external influences.**

Most of the imports of raw materials are coming from Russia.

Most of the metal-working plants and steel processing were set up in late post-soviet period, already using western technologies. The competitiveness of the plants has been also supported by significant state investments.



The only one “true” metallurgic plant in Belarus is OJSC “BMZ” (Belarussian Steel Works) (its revenue accounted for 1.4 billion dollars in 2014).

- OJSC “BMZ” is considered to be one of the best “non-resource” plants in Belarus producing along with simple products such as bars and wire rods high value-added products (seamless pipes, steel cord, bead wire, RML wire, steel wire).
- The quality and technology level of the factory is proved by the geography of exports and significant market shares in the world. **For instance, OJSC “BMZ” accounts for 14% of the world steel cord market.** The plant also holds strong positions on seamless pipes market.
- Exports of metallurgical products are much more diversified than many other Belarusian products. The products hold leading positions in the Baltic States markets, are well-known among European countries (Germany, Italy etc.) and Middle East. The geography covers more than 100 countries.
- Belarusian Steel Works has been designed to use scrap as its main raw material.
- Over the past years the plant invested heavily in modernization and capacity expansion. (over 500 million dollars, financed mostly by loans secured by Belarus government guarantees). **The most critical objective nowadays is the easing up the debt burden of the company.** One of the moves is the possibility that Belarusian Steel Works will float forex bonds worth \$240.5 million (stipulated by the draft decree presented before Belarus President Alexander Lukashenko on 9 November, 2015).
- **To remain competitive in the metal production marketplace the company has to further reduce costs.** The main task is to reduce production energy intensity, first of all electrical energy, which accounts for 77% in the aggregate fuel and energy balance of the company. There is an investment project: Construction of a **100 MW** power park for autonomous power supply of state owned metallurgical plant Belarusian Steel Works.

Manufacture of machinery and equipment; Manufacture of motor vehicles and equipment

Share in GDP, 2013	4,0%
Share in export, 2014	11,5%
Share in revenues, 2014	4,8%
Share in number of employees, 2014	6,9%

Manufacture of machinery and equipment

Machinery and equipment industry includes manufacture of tractors, agricultural machinery, heavy trucks for mining, hydraulic and pneumatic equipment, pumps and compressors, bearings, gears, stoves, burners, office machinery and equipment, industrial refrigeration and ventilation equipment, etc. This industry **takes the third place** in contribution into GDP (3%) among other industries of manufacturing sector after food (5.1%) and chemical (3.2%) industries.

The volume of machinery and equipment production has an upward trend during 2011-2013. The compound annual growth rate was 10%. In 2014 the output of machinery and equipment industry amounted to 2.9 billion dollars. Alongside with production volumes, the share of machinery and equipment in total industrial output has significantly dropped from 9.4% in 2012 down to 6.6% in 2015.

Table 52 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	3.2	3.4	3.0	-	-
Share in export, %	4,5%	4,3%	5,6%	4,6%	-
Share in import, %	9,4%	10,2%	12,3%	11,4%	-
Share in production volume, %	7,88%	9,35%	9,71%	7,56%	6,55%
Production volume, million dollars	4 887,40	6 880,17	6 554,86	4 966,38	2936.60

Share in capital investments, %	1,8%	1,4%	1,2%	1,2%	-
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Belarus actively exports manufactured machinery and equipment abroad. Its share in Belarusian exports amounted to 4.6% in 2014. Main positions of Belarusian exports of machinery are agricultural tractors, heavy trucks for mining, harvesters and other special machinery. At the same time, machinery and equipment industry takes the leading position in terms of imports. It takes **the second place by share in Belarusian imports** with total amount of 4.6 billion dollars.

There are around 1.3 thou enterprises generating 5.7 billion dollars of revenues. Net profit of the industry has been falling dramatically since 2012: it has decreased in almost 3 times. Revenue per employee in machinery and equipment industry is not that high – 40 thou dollars per employee (16 industries has higher figure).

Key players on the market are the following:

- Holding "Amkodor" – the leading enterprise producing road-construction, communal, snow removal, aerodrome, agricultural and other machinery and equipment. Revenue in 2014 – 106 million dollars, 3 quarters of 2015 – 40 million dollars.
- OJSC "Belaz" – the world's largest manufacturer of dump trucks with large and extra-large carrying capacity as well as other heavy transport equipment used in the mining and construction industries. OJSC "Belaz" occupies 30% of the world dump trucks market. Revenue in 2014 – 520 million dollars, 3 quarters of 2015 – 286 million dollars.
- OJSC "MTZ" – the leading enterprise producing tractors and specialized vehicles. The plant occupies 17% of the world tractor market. Revenue in 2014 – 924 million dollars, 3 quarters of 2015 – 495 million dollars.
- OJSC "Gomselmach" – the leading enterprise specializing in the production of agricultural machinery such as harvester threshers, forage harvesters, potato harvesters, groundcare machines, etc. Revenue in 2014 – 335 million dollars, 3 quarters of 2015 – 113million dollars.
- OJSC "Brestgazoapparat" – the leading producer of gas stoves, dual fuel cookers, electric cookers, build in household appliances, dishwashers, etc. Revenue in 2014 – 143 million dollars, 3 quarters of 2015 – 68 million dollars.
- OJSC Lidselmash (agricultural machinery)- Revenue: 47,72 million dollars (2014), 17,92 million dollars (three quarters of 2015),
- OJSC Bobruiskselmash (agricultural machinery) - Revenue: 3,50 million dollars (2014), 1,12 million dollars (three quarters of 2015),
- PA Gomselmash (agricultural machinery) - Revenue: 335,44 million dollars (2014), 106.62 million dollars (three quarters of 2015).
- OJSC "BZTDiA" (tractors) – Revenue in 2014 – 106 million dollars, 3 quarters of 2015 – 54 million dollars.

Table 53 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	1 059	1 110	1 169	1 329
Revenue, million dollars	5607,6	7816,7	7415,0	5759,4
Share in overall revenue, %	3,4%	4,2%	3,8%	3,0%
Share of micro and small enterprises in revenue, %	11,2%	8,8%	9,2%	10,3%
Net profit, million dollars	915,40	1 105,89	733,12	325,12
Taxes, mln \$	620,8	625,6	462,2	620,8
Revenue per employee, \$	36 961	48 938	49 080	40 837
Number of enterprises reported losses	14	10	32	76

Nominal wage in the industry is slightly higher than the average figure for Belarus and amounts to 400 dollars. **Employing 145.4 thou people**, machinery and equipment industry **takes the second place** by number of people employed in manufacturing.

Table 54 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	4,9%	5,3%	5,1%	4,9%	-
Nominal wage, \$	385,9	521,0	633,6	612,1	401,4

96 enterprises were engaged in innovation activities with total expenditures on innovation around 174 million dollars. Machinery and equipment industry **takes the second place** by expenditures on innovation in value terms (after manufacture of coke and oil products) and **the third place** by ratio of innovation expenditures to revenue (after metal industry and manufacture of coke and oil products).

Table 55 Innovation activity

Indicator	2014
Number of enterprises involved in innovation	96
Expenditure on innovation activities, \$ thou	174 457
The ratio of innovation expenditures to revenue	3.4%

Manufacture of motor vehicles and equipment

Belarus played the role of an “assembly plant” in the Soviet economy and, thus, a very substantial and to some extent unique industrial base was created in Belarus, dominated mainly by the traditional industries, including manufacture of machinery and equipment, motor vehicles, trailers and semi-trailers.

The industry is presented by large state-owned producers, which is mostly focused on heavy-machinery industry. Belarusian machine-building enterprises are united in vertical based conglomerates with affiliated suppliers.

Machinery is export-oriented industry. It takes one of the leading place in the volume of external trade of the Republic of Belarus. Companies in machinery industry have trade relations with more than 100 countries. Its products are exported to 105 countries. The machinery products are imported from 77 countries.

The fact that most of the components and materials for machine-building industry comes from abroad is very important. This explains the high figures of imports (3.8% in 2014).

Among the main macroeconomic trends it should be mentioned a decline in production volume to the level of \$ 2.3255 billion in 2014 as well as a decline in share in GDP to the level of 1% in 2013.

Table 56 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	2.2	1.3	1.0	-	-
Share in export, %	12,2%	8,7%	8,4%	6,9%	-
Share in import, %	8,4%	5,0%	5,4%	3,8%	-
Share in production volume, %	5,46%	4,46%	4,47%	3,54%	3,03%
Production volume, \$ mln	3 384,68	3 279,56	3 019,26	2 325,50	1 359,21
Share in capital investments, %	1,1%	1,4%	1,8%	1,1%	-

Machinery products manufactured in Belarus are mainly exported to CIS countries (in some positions the share of exports to these countries is 80% or more). Given the specificity of machinery industry major trading partner is the Russian Federation.

In 2014, the share of profit attributable to the small and micro enterprises has increased and amounted to 9.9% compared to 2.2% (2011).

Table 57 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	139	150	165	192
Revenue, \$ mln	3 791,65	3 341,14	3 157,74	2 446,27
Share in overall revenue, %	3,26%	2,43%	2,23%	1,77%
Share of SME in revenue, %	2,2%	3,5%	6,4%	9,9%
Net profit, \$ mln	936,47	420,48	203,11	57,16
Taxes, \$ mln		246,1	251,9	198,0
Revenue per employee, \$	52 570	53 586	51 532	44 512
Number of enterprises reported losses	5	6	9	24

There are 65 thou employees working in mechanical engineering. It accounts for 2% of employees engaged in the economy. Wages in the industry are not high. In 2015 there was a sharp decline in salaries to the level of \$ 415, which is \$ 200 less than in 2014

Table 58 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	2,4%	2,2%	2,2%	2,0%	-
Nominal wage, \$	430,7	558,8	674,4	646,3	414,7

The ratio of innovation expenditures to revenue is 3,1% that is quite high in comparison with the analogue ratios in different sectors.

Table 59 Innovation activity

Indicator	2014
Number of enterprises involved in innovation	35
Expenditure on innovation activities, \$ thou	75 433
The ratio of innovation expenditures to revenue	3,1%

Defense and armaments industry

The Belarusian defense industry emerged during the Soviet times as a part of a larger Soviet military industrial complex. Traditionally strong Belarusian electrical, electronic and optical equipment industry and accumulated core competences has formed a focus of Belarus defense industry - air defense equipment, optics, electronics, command and control systems, electronic warfare items.



With regard to air defense, Belarus modernises Soviet-era surface-to-air missile (SAM) systems and effectively develops new types of them for several post-Soviet and developing countries. Some of these products already involve no foreign cooperation and contain no foreign components. **Until now, Belarus produced no missiles. Recently, Belspetszhneshtekhnika hinted at plans to produce missiles for SAM systems in Belarus.**

Belarus has been actively developing a range of communication equipment - nation's combat geographical-information systems, integrated counterattack systems for precision weapons, unmanned aircraft systems (UAS), launching systems, and combat systems for special operations and ground forces. In 2015 the development of digital shortwave radio stations are also slated to be finalized.

This year, there are plans to develop a legal framework for designing, testing and using UAS as well as for establishing a centre for certification for operating unmanned aircraft equipment (drones).

Exports:

Up to 70 per cent of goods produced by the Belarusian defense industry goes abroad. Main export items: military electronics, command and control systems, optics, and other components for Soviet and post-Soviet arms and military equipment.

According to the 2014 data of the Stockholm International Peace Research Institute (SIPRI), from 2009-2013 **Belarus' arms exports made up 1% of the world's total sales. The country reached 16th place in the global arms export's rankings.**

Due to close military cooperation with Russia, large share of Belarusian exports goes to Russia. Belarus companies have a significant share (up to 15%) in Russia's military purchases (oboronzakaz). Therefore, many of Belarus-made military equipment is destined to be installed on Russian or Ukrainian machines (tanks, aircraft, etc.).

Starting from 2013 Belarusian military-related exports started to increase significantly.

At the same time the clear policy right now is the diversification of exports, extension of defense exports outside Russia and search for alternative markets and opportunities.

Leading companies in the industry:

- JSC KB Radar (*products include* radars, radar and recognition systems (used to detect aircraft, ships, spacecraft, guided missiles) and electronic warfare ("Groza" VHF/UHF radio communication jammer, "Pourga" HF radio communication jammer, GPS and GLONASS navigation system user jammers, SPR-3 artillery ammo radio fuze jammer set JAMMER SET, "Barkhan" satellite communication and telecast downlink terminals jamming system, "Dozor" mobile radio reconnaissance system and others).
- JSC Peleng (*products include:* Belarus largest manufacturer of electro-optical equipment for the aerospace industry and the military-industrial complex, traditionally focused on Russia)

- JSC Agat (*products include*: Automated control systems for Air Forces and Air Defence; Automated control systems for land forces; Unmanned aerial systems; Technologies; Communication systems and data transmission equipment; Equipment for power supply systems; Onboard computers)
- JSC BELOMO (*products include*: Optical and Optoelectronic Devices; Devices of pneumatic brake gear; High-temperature chladone compressors).
- Unitary enterprise "TETRAEDR" (*products include*: Air Defence Missile Systems, Aerial Target Simulators, Radars, Missile and Gun Systems).
- JSC "Minsk Wheel Tractor Plant" (*products include*: strategic weapons, tactical weapons and MRL, air defence, costal defence, armored vehicles/tanks transporters (autotrains, transport vehicles of 6001 series, standardised hull chassis of 6922 series, military chassis in the load capacity range from 17.8 to 24 tons – 7930 series, as well as vehicles of 543, 6527, and 8021 series, special projects vehicles and components).

The mentioned above enterprises had an aggregated turnover not less than 450 USD mn in 2014.

Conclusion

Belarusian machinery and equipment industry is inherited from Soviet Union times and represented mostly by state-owned agricultural machinery producers such as MTZ (tractors), MAZ (automotive vehicles, buses, trolleybuses), Gomselmash, Lidselmash (harvesters and reaping threshers) and special-purpose transport machinery such as BelAZ (heavy trucks for mining industry), AMKODOR (building and forestry machinery), MAZ (Trucks, buses, towed vehicles), MZKT (trucks, chassis, trailers and semi-trailers, special purpose machinery). They represent more than 70% of all value added of the industry. The main markets for Belarusian machinery and equipment is Russia and CIS countries. Belarusian tractors and heavy trucks are also exported to a number of non-CIS countries.

Belarus takes one of the leading positions in specialized machinery market. It occupies 30% of the world dump trucks market (OJSC "BELAZ"). and 17% of the world tractor market (OJSC "MTZ").

The peculiarity of business model of these large holdings is concentration of all operations under one company: it means that these companies include both production of basic components (including casting, foundry, electrical equipment, cabins, wheels etc.) and assembly of final products. This causes serious distortions in competitiveness of such vertically integrated holdings.

At the same time the industry accumulated strong competences and maintain good infrastructure such as high-qualified workforce, industry traditions, scientific institutions, distribution and supply networks, etc.

In view of the above the perspective investments in the machinery and equipment sector are associated with industry restructuring which i.a. may include:

- Disintegration of value-added chain implemented on the basis of deep analysis of best international practice and identification of strengths and weaknesses of existing value added chain of state-owned holdings
- Improving of R&D and design operations
- Taking advantage of more rational supply policy, including organization of supplies of components from the most efficient sources together with identification of most efficient or innovative in-house component producers and their further development
- Improving of post-sale services

Manufacturing of electrical, electronic and optical equipment

Share in export, 2014	3,4%
Share in revenues, 2014	1,2%
Share in number of employees, 2014	2,3%

Manufacture of electrical and optical equipment includes the manufacture of office machinery and computers, manufacture of other information processing equipment, electric motors, generators and transformers, electricity distribution and control equipment, wires and cables, electric lamps and lighting equipment, etc.

The industry has little impact on the total GDP. The highest value of the share of industry in GDP reached in 2011 (1.4%). In recent years there has been very little decline in this indicator. Statistics illustrate that the production of electrical equipment for the industry remains dependent on the volume of imports. The difference between exports and imports chronically kept at around 4-4.2%

Despite the general instability of the economy in 2015, the share in total production decreased slightly and amounted to 3.45%. The share of capital investments is maintained at around 0.5%.

Table 60 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	1.4	1.3	1.2	-	-
Share in export, %	3,1%	3,1%	3,7%	3,4%	-
Share in import, %	5,4%	6,6%	7,9%	7,0%	-
Share in production volume, %	3,53%	3,52%	3,91%	3,51%	3,45%
Production volume, \$ bln	2,19	2,59	2,64	2,30	1,55
Share in capital investments, %	0,5%	0,6%	0,5%	0,5%	-

During 2011-2014, there was an increase in the number of enterprises in the industry. However, there was a decrease net profit to \$ 88.39 million in 2014. The share of small and micro-enterprises accounts for more than 30% of total revenue, reflecting the dispersal of public enterprises.

The main companies in the industry are:

- JSC "Minsk Electrotechnical Plant named after Kozlov" (power transformers, multi-purpose transformers, package transformer substations, installations of cathodic protection) –Revenue: 163.27 million dollars (2014), 59,79 million dollars (three quarters of 2015)
- JSC "Belarusian Optical and Mechanical Association" that include:
 - JSC "MMW named after Vavilov" (optical and optoelectronic products, optical devices of the brake actuator) - Revenue: 53,34 million dollars (2014), 27,15 million dollars (three quarters of 2015),
 - JSC "Zenit - BelOMO" (optical sights, binoculars, microscopes, weighing machines) - Revenue: 9,06 million dollars (2014), 4,05 million dollars (three quarters of 2015),
 - JSC "Rogachev factory" Diaproektor "" (medical equipment, daily sights, video projection equipment, service station equipment, night vision devices), - Revenue: 15,45 million dollars (2014), 7,77 million dollars (three quarters of 2015)
 - JSC "Zhlobin factory" Svet "" (mechanical parts, construction nails, staples, coated wire, criminalistic magnifier) - Revenue: 0,90 million dollars (2014), 0,47million dollars (three quarters of 2015).

Table 61 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	1 125	1 165	1 190	1 305
Revenue, \$ mln	1 671,80	1 972,68	2 045,33	1 698,66
Share in overall revenue, %	1,44%	1,43%	1,44%	1,23%
Share of SME in revenue, %	32,9%	30,8%	31,6%	36,0%
Net profit, \$ mln	297,80	212,70	152,34	88,39
Taxes, \$ mln		169,9	176,2	145,6
Revenue per employee, \$	25 866	32 403	36 294	31 997
Number of enterprises reported losses	3	3	10	33

Nominal wage in the industry is little higher than the national average. It showed sustainable growth up to 2015 (580 dollars in 2014) when it sharply declined to the level of 400 dollars.

Table 62 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
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Share in average number of workers, %	2,6%	2,5%	2,4%	2,3%
Nominal wage, \$	336,7	438,5	564,6	581,3
	402,2			

Expenditure on innovation activities are comparable to costs in other areas, and accounted for 40.4 million dollars.

Table 63 Innovation activity

Indicator	2014
Number of enterprises involved in innovation	67
Expenditure on innovation activities, \$ thou	40 442
The ratio of innovation expenditures to revenue	2,4%

Conclusion

Belarusian electrical, electronic and optical equipment industry has a great tradition and high potential.

- **World-class level of the industry is proved by scientific international rankings:** Belarus is within TOP 20 countries in the world according to aggregate citation index in the photonics field; and # 2 after Canada according to the average citation index per article.
- The sector's average salary is also very competitive comparing to the neighboring countries. Average salary amounted to USD 402, which was 49% and 32% lower that in Kazakhstan and Russia, respectively.
- Annually more than 14, 4 thousand students educated to technology and technique come from Belarusian universities.
- There are 4 organizations of the National Academy of science; 5 universities, universities' research institutes; 8 sectoral research institutes and scientific development and production centers engaged in electrical, electronic and optical equipment industry.
- **There is a significant accumulated scientific knowledge and know-how in the industry:** most recent break-through developments include: Launch of Belarusian land remote sensing satellite and creation of own independent land remote sensing system by Belarus, development of the supercomputer "SKIF-GRID", new-generation lasers.

Currently the vast majority of the industry enterprises are still state-owned. There is a certain share of inefficient enterprises that have not been modernized, and which are losing their competitive advantages.



At the same time there is a number of highly-technological and R&D advanced companies. Many of them produce products for aerospace and the military-industrial complex. In view of the growing demand for high-tech military weapons, Belarusian military and semi-military enterprises in this industry have a great potential for development. Many of them already supplying world-level equipment to more than 100 countries in the world.

Prospective and profitable are radio- electronic warfare (radars) and optic optoelectronic devices and systems companies.

There are also a few private companies that utilized the accumulated experience and already took their place in the world market. These are mostly small-sized niche companies but already with significant market shares in the world market (e.g Izovac, Adani, Polimaster).

Electricity, gas, water production and supply

Share in GDP, 2014	2,9%
Share in revenues, 2014	6,6%
Share in number of employees, 2014	5,3%

Electricity, gas, water production and supply industry includes activities connected with production and transmission of electricity and gas, provision of thermal energy, water supply and waste water disposal. There has been a sustainable growth of its production volumes in recent years that resulted in **10% of total industrial output**.

Energy industry is one of the basic branches of the national economy of the Republic of Belarus. Its development is determined by the strategy of social and economic development of the state and a number of programs which ensure the implementation of the established priorities with the state support and guarantees. The Belarusian energy system is a complex, including power plants, boilers, electrical and heat networks, which are linked by common mode of operation throughout the country.

Belarus is quite rich in water resources, and those available are sufficient to meet both current and future demands. According to the World Bank estimations Belarus has an extensive network of piped water and sanitation. However, 15 percent of the population still lacks access to them. Eight percent of the country's water supply networks and 5 percent of the sewerage networks need replacing, and 227 wastewater treatment plants need repairs. Groundwater contamination is a hazard. Drinking water is of poor quality because of its high iron content. The government is making it a priority to bring safe drinking water to people, and to build good wastewater treatment and sanitation facilities.

Electricity, gas, water production and supply industry takes the 4th place by the amount of capital investment in the country.

Table 64 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	1.7	2.9	2.6	2.9	3.3
Share in production volume, %	7,57%	7,08%	8,11%	8,75%	10,64%
Production volume, million dollars	4 695,82	5 212,73	5 477,73	5 745,22	4770.90
Share in capital investments, %	8,8%	5,3%	10,6%	7,6%	7,9%

The Belarusian energy system consists of 2 condensing power plants, 10 thermal power plants of high pressure, 29 small power plants. Chief production organizations: the state production association "Belenergo", state production association "Beltopgas", joint stock company "Beltransgas", while being subordinated to the Ministry of Energy accomplish separate economic activity within the fuel and energy complex of the Republic. With regard to water supply and disposal system, there are numerous water facilities across all big cities and towns in Belarus. All water utilities are state owned.

Belarusian electricity, gas, water production and supply industry generates 12,6 billion dollars and stands the 4th after wholesale and retail, food industry, transportation and communication. More than 99% of revenues accounts for medium and large enterprises.

Table 65 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	227	230	244	290
Revenue, million dollars	12043,7	12831,4	13071,5	12588,4
Share in overall revenue, %	7,3%	6,9%	6,7%	6,6%
Share of micro and small enterprises in revenue, %	0,2%	0,2%	0,4%	0,3%
Net profit, million dollars	-652,92	544,89	250,71	416,20
Taxes, mln \$		2 395,2	2 596,4	2 224,7
Revenue per employee, \$	79 542	84 077	87 604	82 854
Number of enterprises reported losses	19	10	10	13

Being the **third largest taxpayer**, electricity, gas, water production and supply industry generates 11.2% of tax revenues of Belarusian budget. This sector also is **the 7th employer** in Belarus: it hires 5.3% of all people employed in the economy.

Table 66 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	5,0%	5,2%	5,1%	5,3%	-

Nominal wage, \$	327,2	417,4	565,3	599,1	453,5
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In terms of innovations, electricity, gas, water production and supply industry seems to be the least active. It spends around 26 million dollars that accounts for 0.2% of its revenues.

Table 67 Innovation activity

Indicator	2014
Number of enterprises involved in innovation	11
Expenditure on innovation activities, \$ thou	26 642
The ratio of innovation expenditures to revenue	0,2%

Conclusion

Belarus cannot cover its demand for energy from domestic sources because its mineral resources and RES are quite limited. The largest part of TPES is provided by imported oil and gas (more than 90 % in total)

- Gas is Belarus' predominant fuel, with a share in the energy balance of about 65%, all of which currently come from Russia.

Disproportion in Belarusian energy sector is to be partially solved by construction of a nuclear power plant (NPP). NPP is being constructed approximately 18km away from Ostrovets, Grodno Oblast. The 2,400MW NPP, consisting of two 1,200MW units, will be the first of its kind in Belarus. The first unit is scheduled for commissioning in November 2018, followed by the second unit in July 2020. The overall investment for the development of the power plant is estimated to be 11 billion dollars. Once the Belarusian Nuclear power station is commissioned, the country will be able to save energy up to 5.6 Mtoe and replace almost 25 % of consumed natural gas per year.

The energy sector is represented mostly by vertically integrated holdings controlled by the state:

- The Belarusian gas sector consists essentially of two companies: Beltransgaz, which owns the high-pressure transportation, transit and storage systems, and is responsible for new construction and maintenance; and Beltopgaz, which is responsible for gas distribution and domestic retail sales. Beltransgaz is 100% owned by Russian Gazprom (in a 2-staged transaction in 2007 and 2011). Beltopgaz is 100% state-owned.
- The Belarusian electricity market is a vertically integrated monopoly run by the state-owned Belenergo. At the regional level, generation, transmission, distribution and supply are carried out by integrated regional utilities, which are part of Belenergo.

The energy sector is characterized by serious disproportion in energy prices. Residential customers are heavily cross-subsidized by non-residential customers. Reforms in the sector are now actively

promoted by EU. Once implemented the energy cost of manufacturing in Belarus is expected to be significantly reduced, thus, contributing to making Belarus a lower-cost producer.

The main goal of state energy policy in Belarus until 2020 is to modernize the national economy on the basis of energy efficient technologies and to provide national security in the energy sector. The state is actively promoting energy efficiency and development of renewable energy and foreign investors' entry. Foreign investors that have entered alternative energy sector so far include: Strabag (biogas facilities); Remondis (recycling); Vireo Energy (bioenergy); TDF Ecotech AG (biogas complex); Interregional Energy Company GmbH (biogas complex).

Water: The water and wastewater sector of Belarus needs big rehabilitation and reconstruction due to the fact that most infrastructure objects were constructed in 1970s and were operated without any major repair. During last decade the Government implemented two 5-years sectoral investment programmes "Clean Water" where most critical improvements were made. At the same time no big comprehensive projects were implemented, Moreover, the procurement process favored local contractors and the projects did not include automation and high-quality equipment. Now IFIs (WB, EBRD, NIB, NEFCO, Sida, NDEP, etc.) have intensified their investment activities in this sector Belarus. The confirmed or negotiated financing as of the late 2015 accounts for **over 200 mn EUR**. The IFIs are focused on big comprehensive projects for rehabilitation of water utilities with introduction of best international practice and involvement of big foreign contractors and equipment suppliers (incl. electrical equipment and automation). This creates very good opportunities for foreign equipment producers and suppliers to be involved into the investment process of reconstruction of Belarusian water utilities.

Construction

Share in GDP, 2014	10,4%
Share in revenues, 2014	6,5%
Share in number of employees, 2014	10,9%

Belarusian construction industry is a well-developed segment that is self-sufficient both in materials and labour. It plays one of the key roles in Belarusian economic development. During the last few years the share of the industry in GDP was constantly increasing. In 2014 it reached 10.4%, while in 2011 this number was 6.6%. Extensive state support programme for improving of housing conditions of population resulted in a residential construction boom during 2000s that became one of the main drivers of Belarusian economy. Commercial real estate is also a fast growing part of the economy.

With slowing down of the domestic demand the state is trying to promote the exports of construction services. Main export destinations for construction works are Russia, Venezuela and China. In their turn Russia and China are the countries where construction services are mainly imported from.

The amount of contractor's business performed within the Construction sector amounted to 10.2 billion dollars. Compared to 2014 there was an insignificant decrease.

In 2015 the share of construction industry in capital investment also decreased to the level of 1.6%.

Table 68 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	6.6	7.4	10.2	10.4	8.0
Contractor's business performed within «Construction» activity, \$ billion	7.1	8.2	10.5	10.2	-
Share in capital investments, %	2,1%	2,2%	2,4%	2,0%	1,6%

Construction industry is one of the Top-10 industries by generated revenue, which in 2014 totaled to 12,3 billion dollars. Net income showed 10% decrease in 2014, compared to that in 2013.

Share of enterprises by revenue is dominated by big and average ones. However, compared to 2011 the share of small and micro enterprises shows constant increase. Also it is worth mentioning, that by number of enterprises, the industry is dominated by micro (71,8%) and small ones (18,9%).

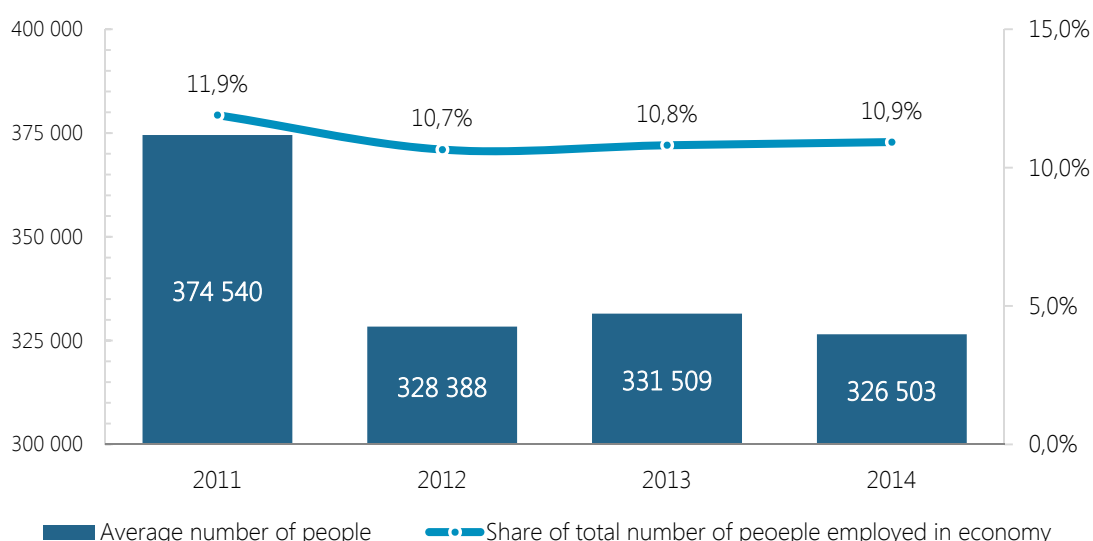
Construction industry is the 7th largest taxpayers, while having the 4th largest share in GDP.

Table 69 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	8 498	8 786	9 571	11 669
Revenue, \$ mln	8634,6	10062,7	13028,5	12329,4
Share in overall revenue, %	5,3%	5,4%	6,7%	6,5%
Share of micro and small enterprises in revenue, %	24,4%	26,4%	30,7%	28,9%
Net profit, \$ mln	411,10	697,51	1 003,99	903,57
Taxes, mln \$		1 073,9	1 235,3	1 158,1
Revenue per employee, thou \$	24,05	31,78	39,72	38,62
Number of enterprises reported losses	147	112	111	147

Construction industry is the 4th largest employer in the economy. More than 300 thou people are employed there. Compare to the year 2013, in 2014 this number insignificantly decreased, however, in total number of employed people it increased up to 10,9%.

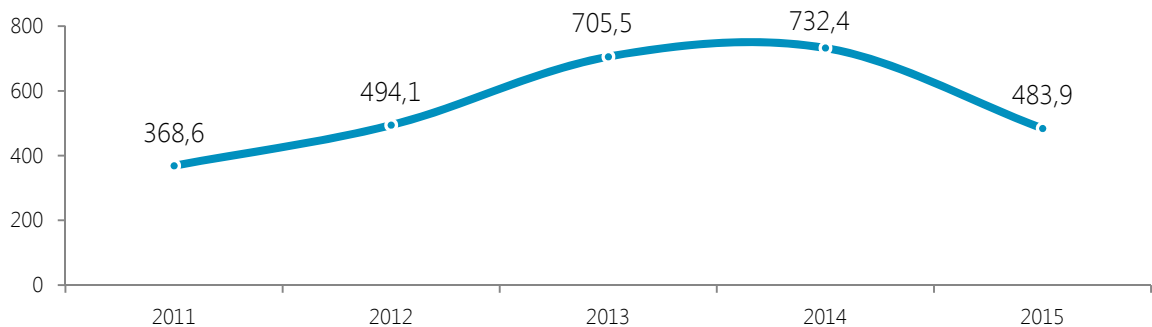
Average number of people in construction industry



According to the nominal wages, the constant growth was observed until 2014, but in 2015 it decreased by about 34% to a level of 483,9 dollars.



Nominal wage, \$



Conclusion

During 2000s Belarusian Government focused on construction sector development as one of the key drivers for economic growth. Extensive state support for residential housing construction in form of soft bank financing programmes to population resulted in construction boom. The policy of industrial modernization as well as fast development of retail, hotel, office real estate contributed to the construction sector development in 2005-2014. The growth of construction sector stimulated building materials industry, furniture and household appliances production, machinery and equipment branch, etc.

However, the recent economic downturn resulted in lowering population incomes and sharp decrease in state resources for residential housing construction programme support. Commercial real estate construction also experiences significant drop. In this respect Government supports the idea of enhancing construction works exports.

During the year of construction boom Belarusian construction industry managed to sustain and develop industry-specific infrastructure inherited from Soviet Union times such as specialized scientific institutions, high-qualified and disciplined workforce, etc. At the same time the further development of construction industry on domestic market and especially construction services exports is associated with shift from old Soviet construction norms to modern standards, including European technical regulations and international approaches to organization of construction process (FIDIC, EPCM, etc.),

Wholesale and retail trade; repair of vehicles, household goods

Share in GDP, 2014	12,1%
Share in revenues, 2014	36,2%%
Share in number of employees, 2014	16,7%

Over the time the share in GDP of wholesale and retail trade, repair of vehicles, household goods has decreased from 15,5% in 2011 down to 12,5% in 2015 (preliminary data). This can be explained by the increase of the competition and as a result, decrease of mark-on.

By revenue wholesale trade is characterized by the dominance of private sector – 78,2%. As of retail trade, it is almost equally presented by the food and non-food products (50,6% and 49,4% respectively).

Since 2011 wholesale and retail turnover increased by 20,5%. Also, over the time the share in capital investment increased from 4,4% in 2011 up to 5,5% in 2014 (data represented in 2015 is reflected only for 3 quarters). The entrance of large retail chain like Evroopt can explain this. However, Belarusian market still is not represented by the world largest retail chains.

Table 70 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	15,3	14	12,9	12,1	12,5
Wholesale and retail turnover, \$ bln	57,59	66,21	66,99	69,37	-
Share of the total fixed assets,%	3,3	3,5	3,8	3,91	-
Share in capital investments, %	4,4%	5,0%	5,1%	5,5%	3,5%

By the share in overall revenue, wholesale and retail trade, repair of vehicles, household goods industry shows the highest number among other industries – 36,2%. And it is growing from year to year. The revenue of small and micro enterprises is representing almost the half of the industry revenues.

It is worthy of note, that wholesale and retail trade, repair of vehicles, household goods industry share in GDP is the largest, while taxes amount to 28,6% of total taxes, which goes only after manufacturing industry (36,1%).

Table 71 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	33 202	35 050	37 012	44 990
Revenue, \$ mln	57607,4	64850,1	68360,9	69105,7
Share in overall revenue, %	35,1%	34,7%	35,1%	36,2%
Share of micro and small enterprises in revenue, %	56,1%	51,4%	49,7%	48,9%
Net profit, \$ mln	2 088,42	2 536,79	1 903,98	1 802,17
Taxes, mln \$		4 705,3	5 250,5	5 676,7
Revenue per employee, thou \$	105,80	127,63	135,30	132,48
Number of enterprises reported losses	44	50	95	161

The number of people employed in wholesale and retail trade, repair of vehicles, household goods industry increased by more than 7%. The share of total number of people employed in the industry shows increasing trend as well. Wholesale and retail trade, repair of vehicles, household goods industry has the 3rd largest share of employed people among other industries. From 2013 the nominal wage significantly increased (by 31%), however, in 2015 it dropped to a level of the year 2012.

Average number of people in wholesale and retail trade, repair of vehicles, household goods industry

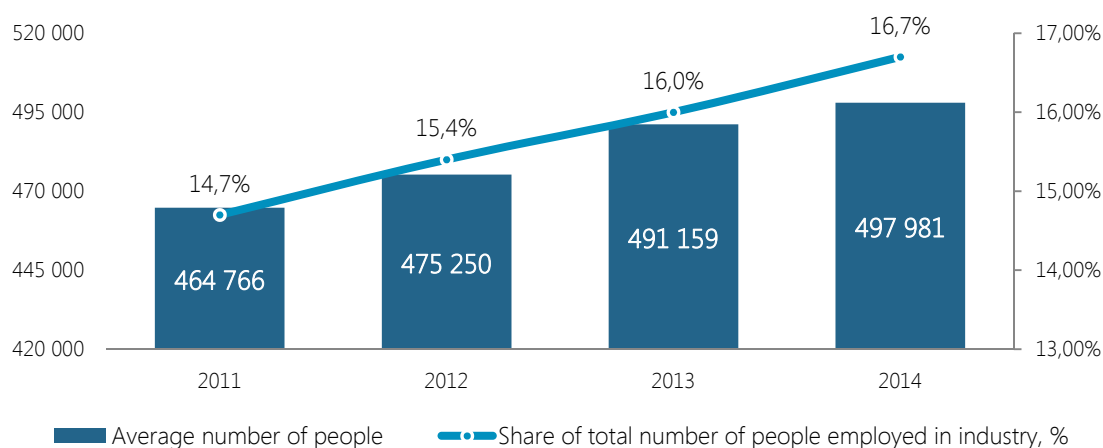


Table 72 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Nominal wage, \$	294,3	382,0	500,9	536,1	398,7

Conclusion

The industry is dominated by private sector with SMEs representing almost half of the industry revenues. **At the same time there is a number of large-sized private companies.**

Wholesale industry is characterized by a large number of enterprises, though the industry becomes more concentrated over the years with obvious leaders in specific segments.

Retail:

- **The retail sector has demonstrated one of the fastest growths in Belarus** (The volume of retail turnover in Belarus increased from 21.7 billion dollars in 2010 to 30.1 billion dollars in 2014, but experienced a decline in 2015).
- **Retail volume in Belarus is distributed almost evenly between foodstuffs and nonfoods (50,6% and 49,4% respectively).**
- There is a state regulation of the sector. According to the new 2014 law **single grocery retailers are restricted to a maximum 20% share of retail value sales.** Other restrictions by the Ministry of Trade include a reduction in the payment terms to suppliers and the obligatory presence of Belarusian goods on retailers' shelves.
- **The retail sectors which have been marked with strong consolidation activities over the past years were food retail, pharmaceutical retail, furniture retail, DIY, electronic appliances, drugstores and jewelry chains.**
- The main representatives of modern retail formats are at the same time the largest players of food retail market.
- **Food retail market is one of the most concentrated retail segments. Eurotorg (Euroopt chain) is the leading company in grocery retail with a 19% share of value sales, x5 times larger than #2 private player.** The company overtook state-owned chain Belkoopsoyuz in 2014 and consolidated its leadership in 2015. TOP 10 largest companies have a more than 50% of the total market.
- **Global food retail chains have not entered the Belarus retail market so far.** Among foreign entrants one can mention Lithuanian capital – Martinn.
- **International companies present in the market are very limited: Kesko Senukai (in DIY segment); pharmaceutical retail ("Sopharma", "Rompharm", "Dominantapharm"); no international player in other non-food retail and household appliances and electronics.**
- **The retail market remains still very underpenetrated with international brands.** However now the entry of international brands is speeding up – brands that entered the market during 2 last years (through franchise) include: Next, Hunkemöller, Burger King, KFC, Max Mara, Giorgio Armani, Norma J. Baker, etc.

- **Common issue for many retailers including big businesses is the debt burden.** In the past a lot of retailers invested significantly in own trade and distribution real estate using bank loans, and now the operational business in many big private companies is under pressure from this development activity.

Accommodation and restaurant activities

Share in GDP, 2014	0,9%
Share in revenues, 2014	0,6%
Share in number of employees, 2014	1,6%

The sector of accommodation and restaurants has a high correlation with tourism sector. In 2014 the export of tourism services amounted to 253.3 million dollars. The growth rate of tourism services exports amounted to 107.3% in 2014. As well as tourism sector, accommodation and restaurants industry is showing a significant growth: its share in Belarusian GDP has increased by 0.2 p.p. to 0.9% in 2014.

The most promising segments within accommodation and restaurant activities that needs further development are agro tourism, gastronomy and mythology tourism, business and sport tourism. Almost 50% of all the guests in Minsk are business tourists; so the further development of the segment depends on MICE infrastructure.

According to National statistical committee of the Republic of Belarus, there are 530 hotels and similar means of accommodation in Belarus as of the end of 2014: 331 hotels, 44 hotel complexes, 4 motels and 151 other types of accommodation facilities. However, other regions of Belarus still need to be developed in terms of accommodation and restaurant supply.

Table 73 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	0.7	0.7	0.9	0.9	-
Share in capital investments, %	0,6%	1,1%	1,4%	1,6%	1,0%

There are almost 3 thou companies engaged in accommodation and restaurant activities in Belarus. Moreover, the number of such companies is growing every year. This sector is mostly represented by micro and small companies.

Accommodation and restaurant industry generates more and more revenues very years. In 2014, this sector gained more than 1.1 billion dollars that almost 2 times more than in 2011. The share of its revenues in total amount of revenues also showed sustainable growth in recent year and reached 0.6% in 2014. It is expected that accommodation and restaurant industry is going to continue growing in future.

Table 74 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	1 896	2 029	2 140	2 861
Revenue, \$ mln	634,8	819,0	1030,4	1114,5
Share in overall revenue, %	0,4%	0,4%	0,5%	0,6%
Share of micro and small enterprises in revenue, %	40,2%	37,1%	39,3%	40,4%
Net profit, \$ mln	35,38	56,01	45,69	26,09
Taxes, mln \$	64,2	76,7	82,9	64,2
Revenue per employee, \$	17 303	22 175	26 786	27 173
Number of enterprises reported losses	8	12	26	26

Around 48 thou people are working in accommodation and restaurant industry that accounts for 1.6% of all employed in the economy. Alongside with revenues, the labor productivity was increasing in 2011-2014. Today, this figure is about 27 thou dollars per employee.

Table 75 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	1,4%	1,5%	1,5%	1,6%	-
Nominal wage, \$	213,2	296,5	400,7	435,8	312,0

Conclusion

In 2014, the number of enterprises in the Accommodation and restaurants sector in Belarus reached 2 861. This was an increase of more than 1,5 times since 2011.

The Hotels and restaurants sector can be divided into two main sub-sectors one centered around accommodation (hotels and other short stay accommodation) and the other around food services (restaurants, bars, canteens and catering). **The food service sub-sector prevails in terms of revenue.** Restaurant's (including cafes, canteens) turnover accounted for **1.5 billion dollars** in 2014 while hotel's revenues amounted to around **25 million dollars**.

The Accommodation and restaurants sector is greatly dependent on the extent of travel and the amount of arrivals.

- Belarusian tourism industry is still underdeveloped in comparison with other countries - in 2014 it contributed to 1.9 percent of GDP. Considering its geographical location and country's cultural and historic heritage the tourism industry has a great potential for the future development.
- Most tourists come from the CIS countries and especially from Russia (more than 80 percent).
- Minsk is the major destination for tourists in Belarus due to its cultural and business importance, central location and developed transportation system (25% of all guests were accommodated in Minsk hotels in 2014; 68% of all foreign guests).

Restaurants sector:

- Belarusian eating out market has been growing on average with a 12% rate during 2009-2014
- The market is dominated by Minsk (37,6% of all market sales)
- Till 2015 Minsk QSR market was represented by only 1 international brand (McDonald's), 2 regional brands (Goody's, Country chicken) and small number of local brands. In 2015 the restaurants under the brands Domino pizza, KFC, Burger King, Papa Johns were opened.

Accommodation:

- As of the end of 2014, there were 530 hotels and similar accommodation facilities in Belarus (+49 hotels compared to 2013). The significant growth in the number of hotels in 2014 was mainly attributed to the fact that Minsk hosted the World Ice Hockey Championship in 2014.
- The vast majority of the existing supply in Belarus is hotels without categories (.67% of the total hotel room stock in Belarus.)
- As of the end of 2014, there were 47 certified hotels of 3-5* level across Belarus, with 24 facilities located in Minsk.
- Significant share of the state-owned hotels built during the Soviet Union time (83% of total room stock in Belarus). Almost all hotels located outside Minsk city are state-owned, and only eight hotels in Minsk are private.
- Three international hotel brands are presented in Minsk – Crowne Plaza by IHG, Renaissance by Marriott International, Marriott brand hotel built by Marriott International (opened in early 2016). In 2016 two 4 star hotels under international brands are expected to be opened (DoubleTree and Hampton by Hilton).
- With considerable growth of supply, in 2014, the occupancy rate in Minsk slightly decreased from 49% in 2013 to 42%. There is also a trend of decreasing prices for hotel rooms which is expected to continue.
- Minsk hotel market is close to saturation.

The main driver of the industry development is **economic development and** gradual increase in the exposure of the Belarusian economy to the world economy. **State policy towards facilitation of the visa regime and towards the improvement of the overall country's reputation and tourist attractiveness is vital.**

Transportation and communications

Share in GDP, 2014	7,7%
Share in revenues, 2014	7,7%
Share in number of employees, 2014	9,5%

Belarus is located at the crossroads of major pan-European transport corridors (West-East and North-South), and this advantageous geographical position has defined a well-developed transport infrastructure. The transport infrastructure of Belarus is represented by a broad network of railways, airways, highways, river and pipeline transports. The largest percentage in the structure of transit of goods by types of transport is covered by motor trucking (highways) - 41%, carriage by rail (railways) - 30% and 28% - by pipelines.

The length of public service railways equals to 5490km. State Union "Belarusian railways" is the Belarusian railroad operating company that provides about 75% of all cargo traffic in the country and more than 50% of passenger traffic. The length of highways is 101 thou km. Republican body of state administration in the field of roads and road activity is represented by "Belavtodor". The most important pipelines (transit oil pipeline "Druzhba", and the main gas pipeline "Yamal-Europe"), which transits (exports and imports) Russian energy resources to the European Union, traversed Belarus. The total length of pipelines is about 11 thou km (about 2/3 of which is gas pipe). Compared to 2013, in the year of 2014 about 471.9 million. tons of cargo was transported, This figure increased by 0.2%.

Telecommunication sector in Belarus has already been developing more than 5 years due to high-demand on services within country and global trends in telecom.

Each of telecom segment is characterized by high growth rate (for instance, IPTV), penetration level (for instance, mobile). Belarus is also characterized as a country with high level of Internet penetration and it is ranked 25 in the list of the countries by the number of fixed broadband consumers per 100 inhabitants, leaving behind all the neighboring countries, except Lithuania.

The penetration rate of mobile communication in Belarus in 2014 amounted to 117%. The number of mobile communication subscribers is increasing from year to year and in 2014 total to 11,4 million. Mobile network covers 97.6% of the country's territory, which is inhabited by 99.8% of population. There are 3 mobile operators in Belarus: "MTS", "Velcom" and "Life:)", 2 of which - MTS and Velcom- control 93% of the market.

Cable TV networks cover 261 cities and has 1,8 million subscribers, the number of which has increased twofold in the last 3 years. In 2015 Belarus fully shifted to digital broadcasting. Currently there are 103 organizations provide air-cable television broadcasting and cable television broadcasting services. OJSC "MTIS" (Minsk television networks) is the largest cable television operator in Minsk, 100% shares of which are municipally owned. At the moment, "MTIS" serves 550 thou subscribers.

The transportation and communication share in total GDP in 2015 (preliminary data) was 7.7%, while in 2014 it was 7,9%. And in 2014 this industry had the 6th largest share in GDP compared to the other industries.

Table 76 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	7,3	7,5	8,3	7,9	7,7
Share in capital investments, %	11,0%	12,6%	9,5%	10,2%	10,5%

Transportation and communication industry had the 4th largest share in overall revenue in 2014 – 7,7%. And it is growing from year to year. The industry is represented by the large and average enterprises that in 2014 amounted to 84,7% of total enterprises.

Having the 6th largest share in GDP, the industry is one of the top-5 tax payers among other industries.

Table 77 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	7 739	8 537	11 927	14 057
Revenue, \$ mln	11797,5	13695,4	14368,8	14662,9
Share in overall revenue, %	7,2%	7,3%	7,4%	7,7%
Share of micro and small enterprises in revenue, %	11,2%	12,1%	15,0%	14,3%
Net profit, \$ mln	1 029,61	1 387,03	1 294,76	1 363,84
Taxes, mln \$		1 346,3	1 469,9	1 460,3
Revenue per employee, thou \$	47,68	56,30	55,38	58,55
Number of enterprises reported losses	18	36	53	86

Transportation and communication industry is the Top-5 employer in the economy. Around 285 thou people are employed there. Comparing to the year 2013, in 2014 this number insignificantly decreased, however, in total number of employed people it stayed at the same level of 9,5%.

In nominal wages, the constant growth was observed until 2014, but in 2015 it decreased by about 24% to a level of 464,3 dollars.

Table 78 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	9,4%	9,4%	9,5%	9,5%	-
Nominal wage, \$	350,7	470,3	604,4	614,0	464,3

Conclusion

Transportation

Transportation is one of the most important industries in Belarusian economy, which is the result of advantageous geopolitical location (geographically Belarus is the center of Europe , and is the bridge between EU and Russia from the political point).

Transportation industry is mainly dominated by state enterprises. Private companies have strong positions only in automobile transport.

- Also there are some projects with World Bank loans and Chinese Banks' loans
- Building of High speed railway, auto bans, air hubs, logistics infrastructure and second Minsk belt road are the most promising projects
- Only over the last few years the government has been implementing public private partnership (PPP) projects with foreign investors. It is expected that the number of PPP projects in the transportation industry will growth in the future
- New Silk Way project implementation will be the main driver of the industry growth.

Communications

Communication industry is one of the most fast-growing sectors in Belarus. In ITU report 2014, Belarus was ranked 38th, taking leading position in CIS countries. Belarus is also characterized as a country with high level of Internet penetration and it is ranked 25 in the list of the countries by the number of fixed broadband consumers.

- Private companies dominate mobile operators business. Foreign investors from Austria, Russia and Turkey have invested in mobile sector.
- During the last 2 years Belarus together with Russian private investor have started PPP infrastructural project in 4G network construction.
- Modernization of cable TV infrastructure can be realized during next few years.
- Investment growth in data centers in Belarus is expected

Financial activities

Share in GDP, 2014	3,9%
Share in revenues, 2014	0,2%
Share in number of employees, 2014	0,4%

Financial sector plays very important role in Belarusian economy. It is represented by a number of key sub-sectors such as banking, insurance and leasing. Financial sector **contribute around 3.6%** of **domestic gross product**. However, its share in country's GDP fell down by 1.2 p.p. in recent years.

The sector of financial activities in Belarus is among the smallest sector of economy in terms of revenue p.a. It generates less, than 0,1% of the overall country's revenue. This sector is very sensitive to business environment. This characteristic played a key role in 2012 and 2013, when the sector's revenue fell dramatically. However, the market was revitalized in 2014 returning to the 2011's indicator of revenue and even surpassing it.

Table 79 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	4.8	3.7	3.6	3.9	4.6
Share in capital investments, %	0,9%	1,0%	0,9%	1,0%	1,1%

Although the sector's share in total revenue is tiny, the profit margins are huge. Having almost 150 000 dollars revenue per employee, at least 163 million dollars return as profit. **Average nominal wage** across this sector is thus **one of the highest** in Belarus and is more than 700 dollars.

It is also remarkable about this sector, that 99,9% of all enterprises are making profit. The financial activities sector totals 585 enterprises, of which 90,8% are micro-sized businesses, 6,5% - small businesses, the rest accounts for medium and large enterprises.

Banking sector is currently totals 28 organizations. Overseas investors hold more than a half of equity capital stake in 70% of banks. Insurance sector is represented by 25 companies with aggregated overseas equity capital of ca. 4% across the sub-sector. Leasing market totals 38 organizations, 31 of which are located in Minsk. As of 2014, the sub-sector's growth rate was 33% compared to 2013.

Table 80 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	369	397	448	585
Revenue, million dollars	1091,3	552,8	338,0	472,0
Share in overall revenue, %	0,7%	0,3%	0,2%	0,2%
Share of micro and small enterprises in revenue, %	92,7%	93,8%	90,2%	82,7%
Net profit, million dollars	105,26	56,63	62,34	163,18
Taxes, mln \$	-	6,8	5,5	7,1
Revenue per employee, \$	168 699	56 585	59 681	148 077
Number of enterprises reported losses	1	0	0	1

Table 81 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	0,4%	0,4%	0,4%	0,4%	-
Nominal wage, \$	465,0	565,4	740,5	780,5	703,7

Conclusion

The financial system in Belarus is dominated by banks. Concentration among commercial banks is relatively high. The combined share of state-owned banks is around 65 percent of the total assets. From the point of view of foreign capital, Russian capital dominates the private commercial banks such as BPS-Sberbank (the largest private bank by assets), Bank BelVeb, Belgasprombank, Alfa-Bank, etc.

With the exception of insurance companies, non-bank financial institutions are almost non-existent. There are neither securities companies, nor private pension funds. The share of leasing is inconsiderable with many (around one third) of leasing companies are controlled by banks.

Further development of the financial sector will depend amongst others on Eurasian Economic Integration which implies integration of financial markets and the harmonization of legislations of the three countries, including the banking and insurance sectors and the stock market.

Banking sector:

- There is a rigorous transparent banking market regulation. The key legislative act – Banking Code – was adopted in 2000, setting clear rules of conduct on the market, covering all main aspects of banking regulation (licensing, capital requirements, etc.) are present. Healthy supporting environment is also at place, e.g. Credit Bureau of the National Bank.

- The minimum amount of the bank regulatory capital is determined by the National Bank and has been significantly increased in 2014-2015: **Currently a minimum amount of the bank authorized fund is to be established in Belarusian rubles in the amount equivalent to 25 000 000 Euros.**
- The sector characterizes by relatively high M&A activity. Most of the buyers are local businesses and local banks expanding their operations in the country.
- **International banks are still not present in the market.** Raiffeisen Bank International is the only truly international bank operating in Belarus (Priorbank, the 7th largest bank in Belarus by assets). Two other western financial groups present are Getin Holding (Sombelbank) and Societe Generale (Belrosbank through Russian Rosbank).
- The state is promoting entry of world-level commercial banks in Belarus. A pilot privatization project with EBRD is being implemented – In May, 2015 EBRD and state-owned Belinvestbank (the country's fourth-largest bank) have signed a memorandum of cooperation, the main point of which is a sale of the bank to a strategic investor before January 1, 2020. Until the end of 2016, a sale of the blocking stake (25% plus one share) of the stakes of the Belarusian state bank to the EBRD

Insurance:

- The insurance sector is characterized by few assets, a high degree of concentration through state ownership, as well as a lack of competition. The state-owned insurance market leader, Belgosstrakh, held a market share of 50% by gross written premiums as of 2015. Privately held companies are represented by foreign companies, captive banks' companies and 2 independent companies (the largest private insurance company "B&B insurance" and small-sized niche bankassurance company "Guarantee")
- The majority of the premiums collected, close to 75 percent [вставить показатель за 2015], flow to state-owned or controlled companies.
- **Privately held companies' scope of business is restricted. For example, private companies are not authorized to sell policies in the compulsory classes of insurance, which are reserved for state-owned companies.** In 2014-2015 5 out of 22 insurance companies suspended their licenses.
- Most perspective segments of insurance that has not been developed so far but have a great potential are medical insurance.

Real estate and lease activities

Share in GDP, 2014	8,4%
Share in revenues, 2014	3,8%
Share in number of employees, 2014	6,7%

Real estate and lease industry includes the following types of activities: sale, purchase and lease of real estate, property management, implementation of projects connected with construction of buildings that are going to be rented in future.

Real estate and lease sector **has substantially been growing** in the last five years: lots of business centers and shopping mall were constructed. This sector contributes around **8.6 % of value added** in Belarus being **the second largest industry** after wholesale and retail trade. According to preliminary data, real estate and lease sector leave behind the construction industry by the amount of value added in 2015.

Real estate and lease industry has the largest share in capital investments – around 26%. Lots of the investments were put into construction of modern shopping centers in 2011-2014. In January-September 2015, the industry increases its share in capital investments up to 27.6%.

Table 82 Main macroeconomic indicators

Indicator	2011	2012	2013	2014	2015
Share in GDP, %	6.1	6.0	7.9	8.4	8.6
Share in capital investments, %	21,3%	20,4%	22,5%	25,9%	27,6%

The industry is represented by 15 thou companies including real estate agencies, large developers, valuation companies engaged in valuation of real estate, etc. Although 96% of them are micro and small companies, around 45% of industry's revenue is generated by medium and large companies. Big share of industry's revenue is attributed to large developers such as Dana Holdings. There is also a positive trend of labor productivity in the industry: it has increased by 48% in 2014 by contrast to 2011.

Real estate and lease industry generates around 2% of tax revenues of Belarusian budget.

Table 83 Financial indicators

Indicator	2011	2012	2013	2014
Number of enterprises	10 075	10 997	12 251	15 142

Revenue, million dollars	4621,1	5068,5	6626,3	7268,2
Share in overall revenue, %	2,8%	2,7%	3,4%	3,8%
Share of micro and small enterprises in revenue, %	38,4%	43,1%	44,7%	44,2%
Net profit, million dollars	1 001,06	926,84	1 047,20	852,28
Taxes, mln \$		280,4	402,3	406,2
Revenue per employee, \$	22 584	23 955	29 539	33 508
Number of enterprises reported losses	31	27	46	58

Real estate and lease industry is the **6th largest employer** in Belarus. There are almost 200 thou employees working in the industry with the average nominal wage of 640 dollars (4th place in terms of the amount of nominal wage).

Table 84 Industry's role in social security

Indicator	2011	2012	2013	2014	2015
Share in average number of workers, %	6,3%	6,3%	6,6%	6,7%	-
Nominal wage, \$	436,7	545,3	721,7	793,2	640,2

Conclusion

The development of real estate has been dynamically developing over the past years. **Most of the activity referred to Minsk.**

Starting from 2015 due to the drop in real income of population and consumer demand until now the all real estate market segments are facing a recession.

In 2015, the vacancy rate in the shopping centers of Minsk reached the peak over the last 7 years and amounted to about 10%, the average vacancy rate in the office real estate facilities increased to 14%. The commercial space rates in euros dropped by 20-30% over 2015. Prices for residential real estate are at their 10 year minimum.

Residential construction:

- 1/3 of total residential construction accounts for Minsk and nearby territories. In absolute terms there were on the average 1 mn m2 of housing built in Minsk annually.
- The housing supply in Belarus is the second highest compared to that in CIS countries (26,1 sq.m per person). While comparing to the neighboring countries Belarus has the highest rank.



- Until 2014 the market boomed with an average deal price reaching 1,630 dollars for 1 m² on average. General economic downturn starting from 2015 is having a strong negative effect, which has resulted in a significant price decrease down to 1,100 dollars per 1 m².
- **In the long-term residential real estate market in Minsk is expected to recover. According to the state's policy the volumes of new housing construction in Minsk will be administratively decreased. The decrease in new supply will inevitably push the prices which are currently at their minimum. The focus will be made on the development of satellite towns and territories outside Minsk Ring Road (MKAD).**

Shopping malls

- Supply of modern shopping centers experience a rapid growth in 2012-2014 (14%, 20%, 14%) having been the result of growth of the investments in construction of modern shopping centers in 2011-2014.
- Within the next 2 years 10 shopping center projects are to be completed. Thus, the total supply of retail real estate will grow **by 38 percent by 2017** in comparison with the beginning of 2015. At the same time most of the projects on the agenda are facing difficulties with financing caused by expensive loans and restricted access to financing.
- The current supply is already exceeding the demand in-place, and competition is continuously intensifying. A record volume of the new retail space that entered the market is also pressing rental rates down.
- **In the longer-term III generation modern shopping malls focused on the franchising of international brands and portfolio expansion will benefit from the changing consumer preference and the migration of customers.**

Office real estate

- Until recently, the office real estate has been viewed as an investment tool warmed up by strong demand and market prices. Office market has been one of the most rapidly developing segments of commercial real estate in Belarus. The volumes of commissioned office space reached its historical records in Minsk over 2013 and 2014 years. The main driver of market growth was the lack of supply, and unmet demand existence.
- In 2015, Minsk office real estate market included 90 business centers of different class and area. 586 thou sq m are the total net floor area (NFA) of all Minsk office real estate (GLA is 750 thou sq m). **The CAGR in the last 10 years was 31%.**
- High growth of supply in the past and market saturation provoked a sharp decrease in the introduction of new facilities (such a situation is observed 5 years ago in the Baltic states).
- Most likely in the near future there will be a transformation of the office market: increased competition among the existing facilities will lead to qualitative changes (application of new technologies, modernization of existing infrastructure), more thorough selection of new projects for investment (only projects with a high potential demand will be realized in Minsk),

e.g. Chinese-Belarusian Industrial Park, Belbiopharm, FEZ, high-tech park; as well as major and significant projects: Headquarters of Gazprom and complex project Minsk World.