



Expert Grup
CENTRU ANALITIC INDEPENDENT

Impact of Foreign Direct Investments on the Moldovan Economy

Valeriu Prohnițchi

Ana Popa

Adrian Lupușor

Study prepared under the project
„Strengthening the National Statistical System”,
UNDP Moldova

Chisinau, 2010



Impact of Foreign Direct Investments on the Moldovan Economy

Valeriu Prohnițchi

Ana Popa

Adrian Lupușor

Study prepared under the project
„Strengthening the National Statistical System”,
UNDP Moldova

ANALYTICAL REPORT
„IMPACT OF FOREIGN DIRECT INVESTMENTS
ON THE MOLDOVAN ECONOMY”

Authors: Valeriu Prohnițchi, Ana Popa, Adrian Lupușor

Expert-Grup Independent Analytical Center

www.expert-grup.org

info@expert-grup.org

MD-2012, Republic of Moldova,

Chisinau, 133 Columna str.,

Tel. /373/ 211-559, 929-994

The Report, prepared for the benefit of the Ministry of Economy, includes impact analysis of foreign direct investments (FDI) on the Moldovan economy. In particular, the extent to which FDI contributed to economic growth, increasing of exports and employment, performance of companies with FDI in comparison with local companies, positive or negative impact of FDI on local producers have been investigated. The paper includes a series of policy recommendations to maximize the positive effects of FDI on the Moldovan economy.

The purpose of this analytical research was to demonstrate how the existing statistical data, especially official statistics, can be used to evaluate the impact of FDI on the Moldovan economy, precisely from this sectorial perspective. Data used for this study were provided by the National Bureau of Statistics of the Republic of Moldova, in compliance with the non-disclosure policy (following the principle of confidentiality of official statistical data). In several cases data from the National Bank of Moldova have been also used. The authors express gratitude to the above mentioned institutions for cooperation and provision of necessary data.



Copyright © UNDP Moldova

The publication has been developed with the support of the United Nations Development Programme in Moldova, within the framework of the Joint Project on *Strengthening the National Statistical System*.



Opinions expressed in this publication do not necessarily reflect the official views of the United Nations Development Programme in Moldova or institutions of the Government of the Republic of Moldova.

Moldova

United Nations Development Programme (UNDP) is the United Nations' global development network, advocating for change and connecting countries to knowledge, experience and resources to help people build a better life.

Descrierea CIP a Camerei Naționale a Cărții

Prohnițchi, Valeriu

Impact of foreign Direct Investments on the Moldovan Economy / Valeriu Prohnițchi, Ana Popa, Adrian Lupușor ; Centrul Analitic Independent – Expert Grup. – Ch. : “Nova-imprim” SRL, 2010. –80 p.

200 ex.

ISBN 978-9975-4120-6-3.

338(478):339.727.22

P 93

TABLE OF CONTENTS

Introduction	8
Chapter 1. Major developments in foreign direct investments in Moldova	11
1.1. FDI: Moldova’s performance in the region	11
1.2. FDI in Moldova’s economy: structural issues	14
1.3. Factors that attract FDI in Moldova.....	19
Chapter 2. Impact of foreign direct investments on the Moldovan economy	22
2.1. FDI impact on the economic growth.....	22
2.2. Competitiveness of the companies with foreign capital versus the local companies	27
2.3. FDI and efficiency of corporate management.....	29
2.4. Influence of foreign capital over the corporate investment	32
2.5. Impact of FDI on the external trade (exports)	36
2.6. Influence of FDI on local producers	37
Horizontal effects of FDI	38
Vertical effects: “wearing apparel” cluster	39
Vertical effects: „beverage industry” cluster	42
2.7. FDI impact on the labour market	44
Chapter 3. Conclusions and policy recommendations	50
3.1. Major conclusions of the study.....	50
3.2. Policy recommendations for FDI attraction	52
Annexes	56

LIST OF CHARTS

Chart 1.	FDI flow per capita in 1989-2008 by group of countries, USD	11
Chart 2.	Stock of FDI per capita, 2008, USD.....	12
Chart 3.	FDI flow and the share of FDI in GDP, 1995-2009	13
Chart 4.	Structure of FDI stock by economic sectors, year 2005, % of total.....	15
Chart 5.	Structure of FDI stock by economic sectors, year 2008, % of total.....	15
Chart 6.	Structure of FDI stock in processing industry, year 2005, % of total.....	16
Chart 7.	Structure of FDI stock in processing industry, year 2008, % of total.....	16
Chart 8.	Average value of tangible and intangible assets per employee, by foreign capital share in the company, MDL, 2004-2008.....	19
Chart 9.	The evolution of the share of companies with foreign capital in the GDP and of FDI share in financing the gross investments in fixed assets, % of the total.	25
Chart 10.	The growth of sales revenues in 2004-2008 depending on the foreign capital share in the company's capital, %	26
Chart 11.	The correlation between the share of foreign capital in the capital of the companies and the sales revenue per employee, 2008	28
Chart 12.	The sales revenue per employee by groups of enterprises in accordance with the share of foreign capital in the company's capital, MDL.....	28
Chart 13.	The share of costs in the total sales revenues according to the share of foreign capital in the company's capital, %.....	29
Chart 14.	Average inventory turnover rate in 2004-2008, by the share of foreign capital in the company's capital, %.....	31
Chart 15.	The average value of the inputs of tangible and intangible assets per company during 2004-2008, according to the share of foreign capital in companies, MDL million	32
Chart 16.	Structure of investments in long term assets, at the level of the entire economy, by groups of companies according to the share of foreign capital in companies, %.....	33
Chart 17.	The share of long term assets input in the total assets in the local companies and those with foreign capital, %	33

Chart 18. Value of assets per company, by the share of foreign capital in the company, during 2004-2008, MDL million	34
Chart 19. Increase in the number of companies with FDI and increase in the value of exports	37
Chart 20. Annual increase in the sales revenue by activity sectors, %	40
Chart 21. Annual increase in the sales revenue per employee, %.....	41
Chart 22. Value of assets per company according to the foreign capital share in the company, mln MDL.....	42
Chart 23. Annual assets value growth per company in companies with foreign capital operating in beverage production and in companies specialised in glass packaging production, %.....	43
Chart 24. Annual growth of sales generated revenues per employee in beverage companies with foreign capital and in glass packaging companies, %	44

LIST OF TABLES

Table 1.	Trends of FDI in national economy and the structure by types of invested capital, mln. USD	13
Table 2.	Distribution of number of companies and foreign capital by groups of companies, by share of foreign capital in the capital of the company, %, 2008	14
Table 3.	FDI stock and structure, by country of origin, thousand MDL and % of total.....	17
Table 4.	Foreign FDI located in other administrative-territorial units than Chisinau, year 2008	18
Table 5.	Top-10 capital intensive and labour intensive sectors with companies with foreign capital.....	20
Table 6.	Top-10 sectors by average asset value per company with foreign capital	21
Table 7.	The share of foreign capital in the economic sectors with over 20% of foreign capital (%), 2008.....	22
Table 8.	The share of foreign capital in the economic sectors with less than 20% foreign capital, 2008, % in the total capital for each sector	24
Table 9.	The economic sectors with the highest increase in sales revenues, 2004-2008.	26
Table 10.	The economic sectors according to the relation between the sales penetration on the market and the share of foreign capital	27
Table 11.	Distribution of sectors by the evolution of inventory turnover rate according to the share of foreign capital in companies	31
Table 12.	Top 10 sectors with highest and lowest investment per company, average value for 2004-2008	35
Table 13.	Top 10 major branches (>10 companies with foreign capital) with positive horizontal effects of the foreign direct investments	38
Table 14.	Annual increase in the sales revenue of the companies from the textile and confection, %.....	41
Table 15.	Distribution of employees per economically viable enterprises, classified according their foreign capital share, % of the total number of employees, %.....	45
Table 16.	Average number of employees in economically viable enterprises, classified according the foreign capital share, people	46
Table 17.	Monthly average salary and sales/unit of employees in economically viable enterprises, classified according the foreign capital share, MDL	46
Table 18.	Number of employees in foreign-capital enterprises per sectors of activities, persons	47

LIST OF ANNEXES

Annex 1.	Sales revenues per employee, classified according to the FDI share in the company statutory capital, MDL, 2008	56
Annex 2.	Average value of assets per company, groups of economic activities and groups of enterprises according to the share of foreign capital in the total statutory and supplementary capital, thousand MDL, 2008.....	58
Annex 3.	Average value of assets per employee, groups of economic activities and groups of enterprises according to the share of foreign capital in the total statutory and supplementary capital, thousand MDL, 2008.....	61
Annex 4.	Share of costs as part of the sales of companies per groups of economic activities and groups of enterprises according to the share of foreign capital in the total statutory and supplementary capital, %.....	63
Annex 5.	Average rate of inventory turnover (sales revenue per stock value) per groups of economic activities and groups of enterprises according to the foreign capital share in the total statutory capital and in the supplementary capital	65
Annex 6.	Correspondence between exported products according to CSCI and categories of activities according to CAEM.....	67
Annex 7.	Value of exports and estimated number of companies per categories of goods.....	71
Annex 8.	Number of companies with foreign capital and median sales value of companies without foreign capital, MDL per company.....	73
Annex 9.	Total number of employees per sector, in companies without foreign capital and in companies with foreign capital, persons	76

ACRONYMS

CAEM	–	Classification of Economic Activities in the Republic of Moldova
FDI	–	Foreign Direct Investments
NBM	–	National Bank of Moldova
NBS	–	National Bureau of Statistics of the Republic of Moldova
SITC	–	Standard International Trade Classification
UNCTAD	–	United Nations Conference on Trade and Development

INTRODUCTION

Measuring and comparing on an international scale the impact of foreign direct investments (FDI) on economic development is a difficult task, not ultimately because of very limited statistical data, but also because of the difficulty of establishing unequivocally and measuring the intensity of cause-and-effect relationships. To date, the economic policy dialogue in terms of the role of FDI is dominated by three key ideological approaches¹:

- ♦ The supporters of the so-called „Washington consensus“ (which, obviously, include multinational corporations and corporate lobby groups) are very enthusiastic about the role of FDI in the economic development of underdeveloped and transition countries and state that the larger the FDI flows attracted by countries the better;
- ♦ Academic sceptics believe that, ultimately, the origin of investment resources is not important and, therefore, there should be no difference between investments financed from abroad and those financed from the country's internal resources;
- ♦ Supporters of economic dirigisme believe that FDI coming into developing countries or transition countries should be subject to performance criteria and stricter requirements, like effective implementation of technological transfer, purchase of raw materials from suppliers in the receiving country, etc.

In extremis, none of the three approaches is confirmed empirically². In fact, the economic impact of FDI on the host country depends on a very wide range of factors, which vary greatly from one economy to another. Moreover, the impact of FDI can vary greatly from one sector to another, even within one the same economy.

When sufficiently disaggregated data by certain economic sectors are available, it is possible to make a relevant analysis. The goal of this analytical study is to demonstrate how existing statistical data can be used to evaluate the impact of FDI on Moldovan economy, precisely from this sectorial perspective. Particularly, the authors examined to what extent FDI contributed to economic growth, the growth of exports and employment. Also, we investigated whether companies with FDI are more, or less successful than local companies, and whether FDI had any positive or negative impact on local producers.

The data used for this study were provided by the National Bureau of Statistics (NBS), in compliance with the non-disclosure policy (i.e. the data received don't contain companies' identity) and represent a selection of key indicators by company, compiled by the NBS, based on financial reports (balance sheets) provided by companies. The data cover a relatively short period (2004-2008) and include only a small part of indicators reported by companies in the financial reports. Although, in practical terms, we could have used the data for 2009 as well, they would definitely distort significantly our analysis, because of the dramatic decrease of FDI, caused by the world financial crisis.

The database obtained from NBS was afterwards processed by Expert-Grup, in order to eliminate doubtful data, for instance, companies who reported zero assets or sales. Sure enough, it is rather difficult to understand how a company can be economically sustainable, when it

¹ Theodore H. Moran , Edward M. Graham and Magnus Blomström, "Does Foreign Investment Promote Development?", May 2005, Peterson Institute for International Economics.

² Idem;

does not have any assets and/or does not sell anything continuously during several years³. Also, we mention the fact that the group of „economically dead” companies, eliminated from the analysis, included companies which, on paper only, „have” foreign capital. This means that certain companies with foreign capital are also affected by extreme economic inefficiency.

Also, NBS offered some data aggregated based on the Structural Questionnaire and 5-C reports (Expenditures) provided for each company. In order to analyze the impact on external trade, we also used data for external trade, compiled by the NBS. In several cases, we also used data offered by the National Bank of Moldova, especially, in what concerns the analysis of macro-economic indicators.

Taking into account the goals of the UNDP project, within which this study was developed, we believe important to mention that, during the research, we noticed that NBS has an immense volume of statistical data, which could be used more efficiently by the Government, to carry out extremely useful studies, and to analyze the impact of its policies. A wider access of researchers to statistical data would allow, for instance, the integration of certain databases kept by NBS and a more refined study of the issue of foreign direct investments (but also of many other issues, relevant to economic policy). In particular, this would allow to analyze the impact of FDI on external trade (studied here only generally), on conditions of work, would allow to analyze the process of technological transfer, positive/negative externalities of FDI on economy in whole, „backward” connections on local suppliers, competitors and consumers. As a concept, this integration of different databases is easy to be carried out through fiscal identification codes, which are unique for each reporting-company and provided in each report. Technically, it is difficult to perform this integration, because it is very labour-intensive and databases have different formats and structures.

We should also mention the fact that, during the development of the study, we noticed that data on foreign investments, offered by NBS, are different, in certain cases significantly, of those aggregated by the National Bank of Moldova. For instance, in the Statistical yearbook of the Republic of Moldova, NBS reports that, for 2008, foreign investments amount to 237.7 million USD, while NBM data report 691.5 million USD. Some differences are explainable: for instance, NBS data don't include the profit reinvested by the companies. Other differences are explained by the fact that NBM processes additionally the data received from NBS (even if it doesn't have access to the database, and the methodology of this creative activity is obscure). This leads to enormous differences, even in chapters which theoretically should not differ too much. For instance, in 2008, the amount of investments in the statutory capital, reported by NBM, was almost 3 times larger than that reported by NBS. The reasoning brought by NBM is that its indicator also takes into account „actual” flows of investments, which are noticeable in banking statistics, but which are not provided by economic entities in the form 1-Invest, submitted to NBS. In particular, in 2008, NBM took into account the re-evaluation of the capital, made by certain big companies, while NBS didn't. Nevertheless, we couldn't obtain a consistent justification of these systematic differences, neither from NBS, nor from NBM. Although our study didn't aim at explaining these discrepancies, we believe that NBM and NBS should reach a consensus concerning the methodology they use, otherwise it is rather difficult to analyze and justify economic policies.

The study is structured as follows. In chapter 1 we analyze the performance of the Republic of Moldova in attracting foreign direct investments and compare these performances with those reached by other countries in transition. In the same chapter, we provide a structural analysis of foreign direct investments by sectors of operation, geographical origin and territorial

³ It should be noted that zero assets are frequently accompanied by zero sales reported by companies, in other words, a company reporting zero assets would probably report also zero sales.

location. Chapter 2 is the main part of the study, which analyzes the impact of foreign direct investments on Moldovan economy. This analysis concerns the contribution of foreign direct investments to the economic growth, labour market and exports. And, in several instances, we also compare companies with foreign capital to local companies, which don't have foreign capital. For analytical purposes, the companies were distributed in 5 groups: 1 – no foreign capital; 2 – companies with 1 to 25% of foreign capital, 3 – 26 to 50%; 4 – 51 to 75%; and 5 – 76 to 100%. Chapter 3 contains the main conclusions of the analysis and recommends a range of policies in order to maximize the positive impact of foreign direct investments on the Moldovan economy.

We take this opportunity to acknowledge the National Bureau of Statistics and the National Bank of Moldova for cooperation and provision of all necessary data. At the same time, we emphasize that authors are the only one responsible for the interpretation of data and the provided conclusions.

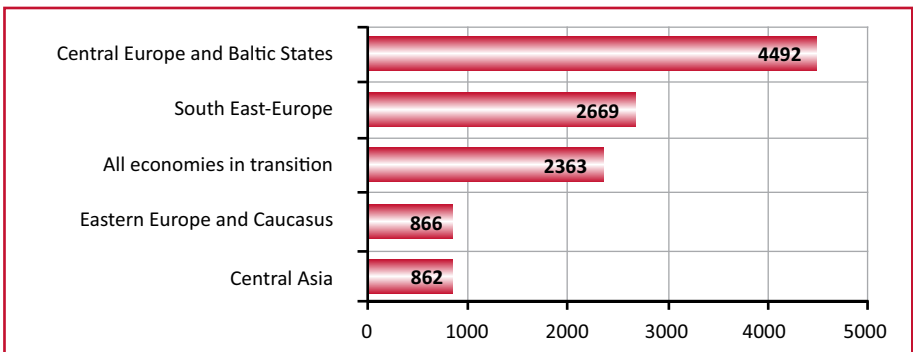
CHAPTER 1.

MAJOR DEVELOPMENTS IN FOREIGN DIRECT INVESTMENTS IN MOLDOVA

1.1. FDI: Moldova's performance in the region

The collapse of the communist system determined at the end of the 80's – beginning of the 90's the redirection of the flows of foreign direct investments (FDI) to countries with new political regimes from Central, Eastern, South-eastern Europe, Caucasus and Central Asia. Foreign investments in transitional countries grew rapidly, so far as it relates both to amount, and to share in the flow of global FDI. Thus, from 0,03% of the global FDI flow, received by transitional countries in 1990, their share raised to 7% in 2008⁴. Although they entered the period of transition without foreign investments or with a insignificant amount of these, the further evolution of transitional countries in the attraction of FDI was different and depended, in fact, on the initial economic potential of the states, on natural resources and on the rapidity and efficiency of economic reforms. In this context, most efficient were countries from Central Europe and Baltic countries, which implemented reforms much more rapidly and which reached significant economic progress, even in the first decade of transition. In these countries, the flow of FDI per capita between 1989-2008 reached 4492 USD (Chart 1). Other countries were less attractive for investors, but significant differences were noticed also in the group of South-Eastern and CIS countries. According to UNCTAD data from 2007, almost 82% of the flow of foreign investments reached only 5 of those 19 countries from this area: Russia, Romania, Kazakhstan, Ukraine and Bulgaria.⁵

Chart 1. FDI flow per capita in 1989-2008 by group of countries, USD



Note: The region Central Europe and Baltic States includes the following countries: Croatia, the Czech Republic, Estonia, Latvia, Lithuania, Poland, Slovakia, Slovenia, Hungary; South-eastern Europe: Albania, Bosnia and Herzegovina, Bulgaria, Macedonia, Montenegro, Romania, Serbia; Eastern Europe and Caucasus: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine; Central Asia: Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Turkmenistan, Uzbekistan.

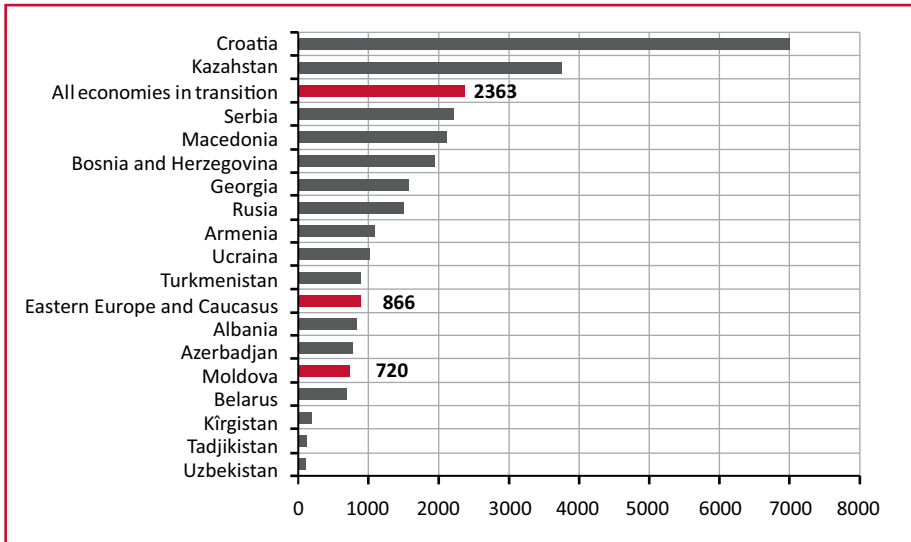
Source: EBRD.

⁴ UNCTAD database.

⁵ World Investment Report 2008, UNCTAD, 2009.

Countries from Eastern Europe and Caucasus (with FDI amounting to 866 USD per capita on the average) and Central Asia (862 USD per capita) were the least attractive for foreign investors even from the beginning of the transitional period, this is due to the negative appeal of the business environment and to the lack of transparency in the process of privatization. In some countries natural resources compensated institutional drawbacks, in the first phase of the transition, investors were attracted by Russian, Kazakh and Azerbaijan economies. In this context, the Republic of Moldova didn't have a very good position – no natural resources, low economic potential and unsound institutional environment – it was listed among the last five states according to the stock of FDI per capita in 2008 (Chart 2). Thus, during 1989-2008, the net flows of FDI per capita in Moldova were below the regional East European average.

Chart 2. Stock of FDI per capita, 2008, USD

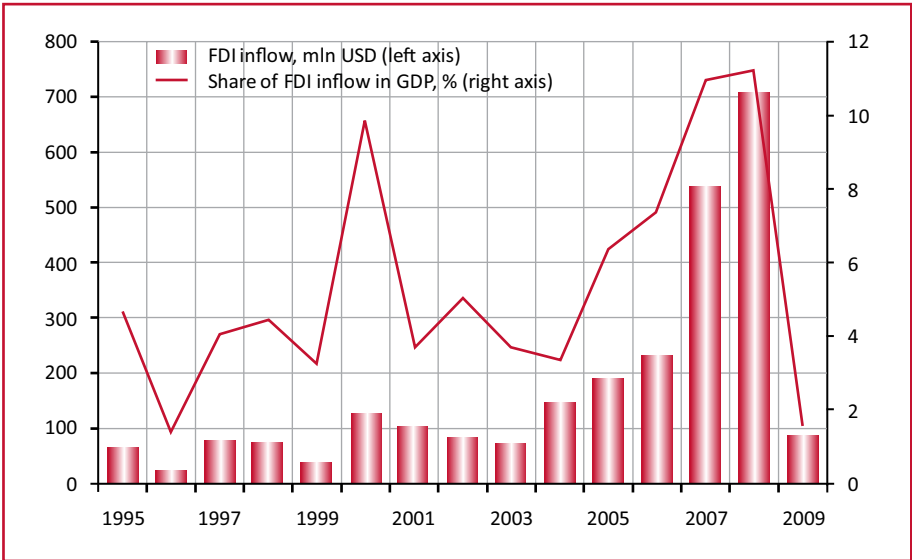


Source: UNCTAD.

The Republic of Moldova was able to attract FDI only after the convincing re-launching of the economic growth and reaching a certain economic and political stability in the country. But until 2004 FDI flows didn't follow a well defined trend, more significant increases are due to occasional penetration of the Moldovan market by big companies, like: Lukoil (Russia) in 1995, Union Fenosa (Spain) in 2000. Only in 2004 the Moldovan economy experienced a more constant growth, but only in 2007 FDI flows showed a more significant growth, surpassing the regional average and reaching 10% of the GDP (Chart 3). The modest FDI flow until 2007 in the Republic of Moldova was caused by the low level of country's competitiveness, economic theory and empirical measurements prove the strong correlation between these indicators⁶. It looks like the unfavourable position of the Republic of Moldova in international rankings had a certain impact on decisions made by foreign investors, who preferred to invest in more remote, but more economically and politically stable countries.

⁶ A. Popa "Foreign direct investments in the economy of the Republic of Moldova and perspectives for their growth in the framework of neighbourhood with EU", 2007.

Chart 3. FDI flow and the share of FDI in GDP, 1995-2009



Source: authors' calculations based on NBM and NBS data.

It seems like an important role in attracting FDI to Moldova had the adhesion in 2007 of Romania to EU, followed by the relocation of certain European businesses from Romania to Moldova, where tax conditions and labour costs were considered to be more attractive. FDI grew rapidly in 2007, and continued to do so in 2008, when the reinvested profit was charged zero tax. But, the zero tax for the reinvested profit is not the only factor which attracted foreign investors and it looks like it wasn't the most important. Thus, in 2008 FDI continued to grow, with the major share for statutory capital, and not reinvested profit of companies (Table 1).

Table 1. Trends of FDI in national economy and the structure by types of invested capital, mln. USD

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total FDI	127.54	103.44	84.05	73.75	146.2	190.7	233.23	539.31	707.57	86.43
Statutory capital	83.69	110.89	60.13	39.66	114.12	79.63	119.02	227.38	441.7	155.08
Reinvested profit	-2.6	-36.64	-27.43	15.34	38.07	27.35	41.59	112.81	99.48	-24.91
Other capital	46.45	29.19	51.35	18.75	-5.99	83.72	72.62	199.12	166.39	-43.74

Source: NBM.

Nevertheless, it seems relevant to ask ourselves about the impact of the zero tax for reinvested profit on the decisions made by foreign investors. It is obvious that the level of income tax (rather low, compared to the regional level) was not the only factor to have a negative impact on foreign investors' decisions. Other duties and taxes (like the high contribution to the state social insurance), as well as the general business environment, were also rather important factors, maybe even more important. But it looks like the zero tax had a positive impact on decisions made by companies with foreign capital to reinvest their profits and the only thing that prevented investors from carrying out their plans was the world financial crisis. The quar-

terly progress of flows of reinvested profit in 2008 obviously prove the fact that the financial crisis had a big impact on investors' plans. In the first quarter of 2008, when there was little talk about the crisis, the flow of reinvested profits grew significantly (2.3 times in economy as a whole and 3.1 times in the non-banking sector). In the second and third quarter of 2008, when the situation of the world economy caused more and more concern, the amount of FDI as reinvested profit practically remained at the level of the corresponding quarters of 2007. In the fourth quarter, at the height of the crisis, the reinvested profits decreased 2.3 times. It is interesting that, at least in 2008, the financial crisis impacted precisely the decisions of profit reinvestment, and not the decisions to invest in the statutory capital, which continuously grew during the year.

In 2009, in the context of the world financial crisis, and of the political instability in the Republic of Moldova, FDI flows diminished significantly, over eight times. This is one of the most significant decreases of FDI in Central and Eastern Europe. The negative profit of foreign companies led to negative values of reinvested profit in 2009, revealing, after all, a disinvestment process.

1.2. FDI in Moldova's economy: structural issues

According to our estimations, 32% of the foreign capital invested in Moldova belongs to companies with 100% foreign ownership, and the rest, 68%, to companies with joint capital (domestic and foreign). In general, both by total amount of the capital, and by number, companies with foreign capital are concentrated in the group of companies with a larger share of foreign capital (75-100%) (Table 2). The second group is formed by companies with a share of foreign capital varying from 26 to 50%. The group of companies with up to 25% of foreign capital contains the least companies with foreign capital. This structure of ownership reveals the fact that foreign investors prefer to be more than on paper only present in companies in which they invest or create in Moldova, in other words they want to have as much as possible or even full control over the management of companies.

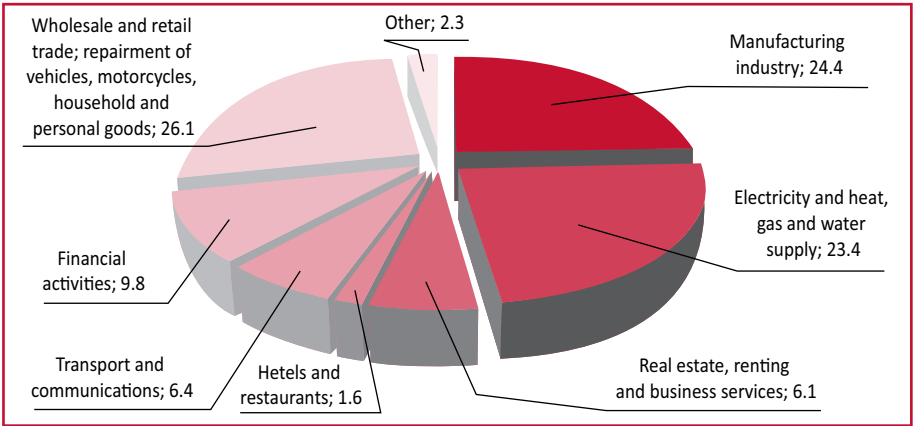
Table 2. Distribution of number of companies and foreign capital by groups of companies, by share of foreign capital in the capital of the company, %, 2008

	Up to 25%	26-50%	51-75%	76-100%	total by row, %
Distribution of total amount of foreign capital on groups	0.4	14.8	8.5	76.3	100
Distribution of total number of companies with foreign capital on groups	9.8	18.6	12.7	58.9	100

Source: Authors' calculations based on NBS data.

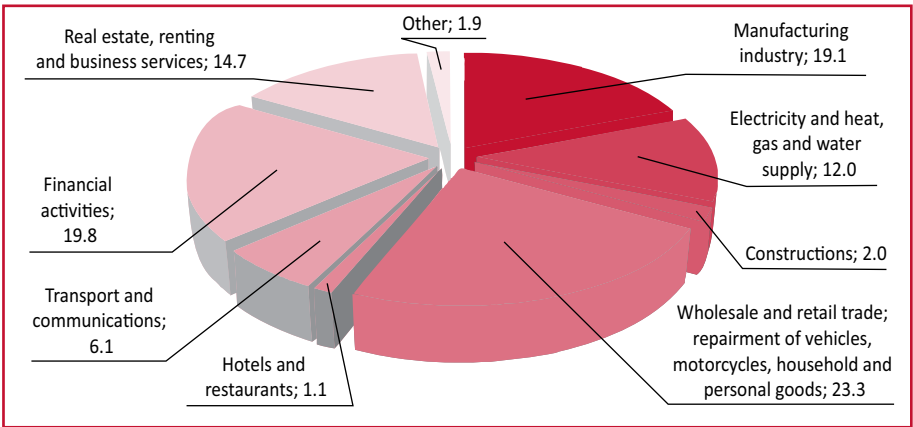
During 2005-2008, FDI grew, as it pertains to the absolute amount, and also diversified. If, at the end of 2005, FDI were mainly present in sectors like „processing industry”, „electrical and thermal energy, gas and water” and „wholesale and retail trade; car, motorcycle, household and personal items repairs”, in 2008, the share of „financial activity” and „transactions with movable effects, rentals and provision of services to companies” grew (Chart 4 and Chart 5). The growth of foreign investments in the financial sector synchronized with the expansion of several European banks in East-European countries, two of which – Veneto Banca and Societe Generale – reached Moldova.

Chart 4. Structure of FDI stock by economic sectors, year 2005, % of total



Source: authors' calculations based on NBS data.

Chart 5. Structure of FDI stock by economic sectors, year 2008, % of total

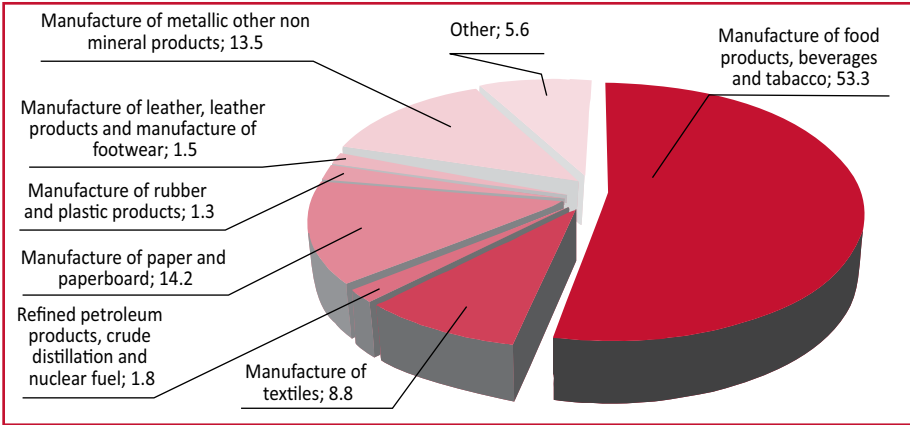


Source: authors' calculations based on NBS data.

Thus, the significant growth of FDI in 2007-2008 happened mostly due to investments in the banking sector. Financial activities received 38.5% and 36.5% in 2007 and, respectively, 2008, from the total flow of FDI during these years. Other attractive sectors, which collected a significant amount of FDI, were: wholesale trade and brokering, retail trade, real estate transactions, rentals and provision of services to companies. Together, in 2008, these sectors received 46.7% of FDI. Thus, the remaining sectors, including processing industry, accumulated only 16.8% of FDI flows in 2008. The distribution of FDI flows on economic sectors show, after all, the fact that these concentrated mostly in non-tradable sectors and, consequently, didn't have major impact on the growth of the national economy's competitiveness. The good part is that the structure of FDI in the industrial sector diversified during the last years. At the end of 2005, over 53% of FDI in the sector were concentrated in food, drink and tobacco industry. At the

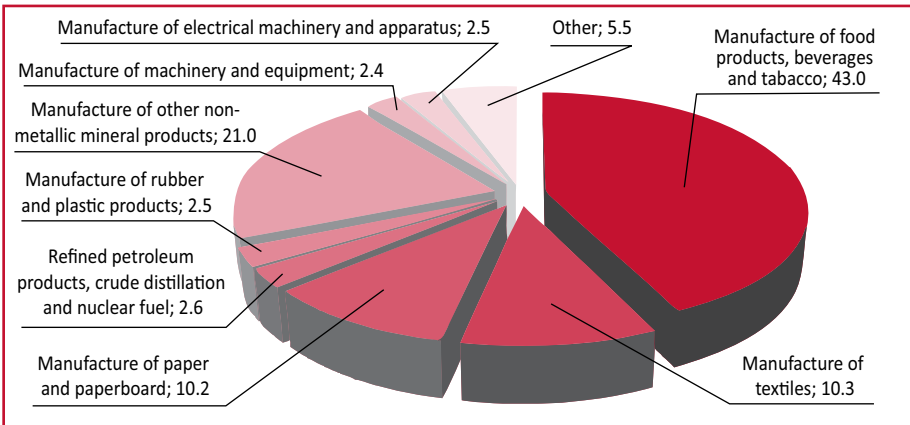
end of 2008, their share diminished to 43%, the share of other sectors (like the textile industry, ready-made clothes, production of other goods from non-metallic minerals) increased significantly (Chart 6 and Chart 7).

Chart 6. Structure of FDI stock in processing industry, year 2005, % of total



Source: authors' calculations based on NBS data.

Chart 7. Structure of FDI stock in processing industry, year 2008, % of total



Source: authors' calculations based on NBS data.

Changes in FDI by economic sectors had two different patterns of growth. In some economic sectors, FDI increased gradually, while initial investments in the sector were followed by investment from new foreign companies and contributed further to higher investment flows. Some typical examples in this regard are trade, textiles and clothing industry, production of rubber and plastics, telecommunications (not just mobile telephony!). In other sectors, such as energy or production of electrical and electronic equipment, FDI entered in one year, often due to significant investments made by a few companies (or even one company).

Speaking about the geographical origin of FDI in Moldovan economy, it also underwent significant changes (Table 3). In 2008, the first in the top of FDI source countries were the states with a tax system fairly tolerant to the hosted capital: the Netherlands and Cyprus. The origin of investment from these two countries amounting to 31% leads to a distorted analysis of investment by country of origin, as the capital originating from the Netherlands and Cyprus has often other origin than a Dutch or a Cypriot one (including Russian, Romanian, Ukrainian or even Moldovan). Significant progress in this respect was shown by Italian investments over the last years, which ranked in 2008 the third in the top, while the total stock of Italian investment increased 10 times (in nominal value). The major Italian investments were made in the textile and clothing industry. Russia ranks the fourth, after descending from the second place held in 2005, but the real investment originating from Russian investors could be higher, if the investment coming from the Netherlands and Cyprus were not considered.

Table 3. FDI stock and structure, by country of origin, thousand MDL and % of total

2005			2008		
Country	Investment volume	Share in total, %	Country	Investment volume	Share in total, %
Netherlands	1472722.0	17.6	Netherlands	3159987.0	18.2
Russia	1115524.0	13.3	Cyprus	2210941.0	12.7
Spain	1022566.0	12.2	Italy	2131283.0	12.3
Great Britain	811339.1	9.7	Russia	1351094.0	7.8
USA	500921.5	6.0	Germany	1051680.0	6.1
Switzerland	498442.7	6.0	Spain	992775.6	5.7
Germany	447882.7	5.4	Great Britain	926134.1	5.3
Romania	388832.3	4.6	Romania	802164.6	4.6
Cyprus	234838.4	2.8	USA	772993.3	4.5
Italy	200727.7	2.4	France	638454.5	3.7
Mauritius	158637.4	1.9	Liechtenstein	372378.2	2.1
British Virgin Islands	150094.7	1.8	British Virgin Islands	327657.7	1.9
France	147742.9	1.8	Switzerland	251587.8	1.4
Liechtenstein	121637.8	1.5	Israel	242708.9	1.4
Luxembourg	106352.2	1.3	Ukraine	230449.3	1.3

Source: authors' calculations based on NBS data.

As in the case of the structure by economic sectors, changes in FDI by country of origin had different patterns. While some countries are present in Moldova through massive investment over many years (e.g. Italy), investors from other countries made large investments only episodically (e.g. Switzerland) or even in one year (e.g. Spain), and their share decreased in the meantime. The absolute reduction of the investment stock of Swiss and Spanish origin should be highlighted as a negative trend. We should note, however, the surprising appearance of two new countries in the top, Ukraine and Israel, while both countries increased their investment in the countries of Southeast Europe and Eastern Europe.

Another specificity of FDI in Moldova is that they are highly concentrated in territorial terms and that this concentration was strengthened over time. This correlates with the economic growth pattern that prevailed after 2000, when growth was polarized to Chisinau municipality.

In 2008 Chisinau benefited from 79.8% of the total stock of FDI. Even after exclusion of some large sectors with investors whose headquarters are located in Chisinau (production and distribution of electricity, production and distribution of gas fuel, telecommunications and financial activities), the share of foreign capital invested in Chisinau remains quite high - 69.1%.

Table 4. Foreign FDI located in other administrative-territorial units than Chisinau, year 2008

CAEM Code	Description	Stock value, MDL	Share, % of total by economic sector
D26	Manufacture of other non-metallic mineral products	508976468	73.1
D159	Manufacture of beverages	279727310	55.0
D18	Manufacture of wearing apparel; dressing and dyeing of fur	127674777	78.5
D158	Manufacture of other food products	94489654	74.2
I60	Land transport	42995231	75.3
K71	Renting of machinery and equipment without operator and of personal and household goods	19537310	93.5
A014	Agricultural and animal husbandry service activities, except veterinary activities	7738002	100.0
D153	Processing and preserving of fruit and vegetables	7363544	99.7
A013	Production of crops combined with farming of animals	6229115	100.0
D156	Manufacture of grain mill products, starches and starch products	4024270	99.9
O90	Sewage and refuse disposal, sanitation and similar activities	2730455	100.0
D28	Manufacture of fabricated metal products, except machinery and equipment	1555232	65.5
D154	Manufacture of vegetable and animal oils and fats	1378530	99.6
A012	Farming of animals	1138351	99.6
D31	Manufacture of electrical machinery and apparatuses	860909	62.9

Source: authors' calculations based on NBS data

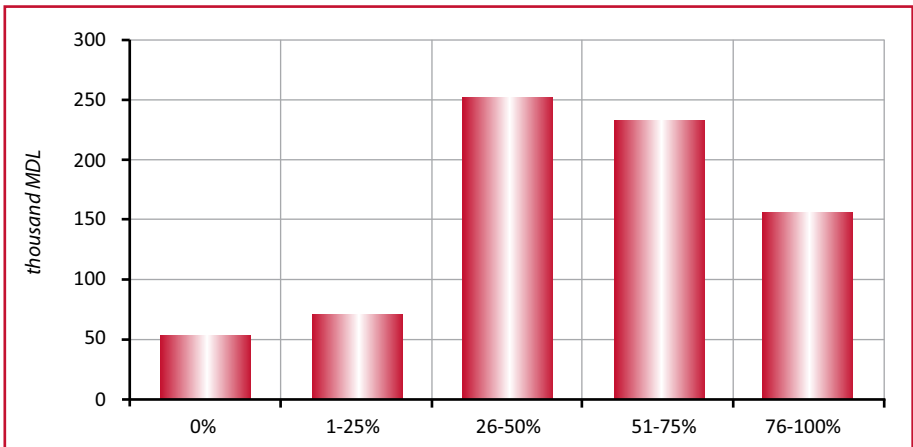
This shows that, outside its capital city, Moldova is not very attractive to investors, particularly because of its very poorly developed physical and social infrastructure. However, cheaper labour in the rayons is a competitive advantage for them and this led to the establishment of some foreign companies outside Chisinau. This refers to labour intensive sectors (such as garment industry), sectors where the proximity to raw materials is essential (beverage production, processing and preservation of fruit and vegetables, production of building materials) and sectors focused on the servicing of economic operators primarily located in areas other than Chisinau (e.g. rental of machinery and equipment without operators, services for agriculture and livestock services). More details can be found in Table 4.

1.3. Factors that attract FDI in Moldova

To understand which factors attract foreign investment in Moldova, we examined whether foreign companies are more capital-intensive or labour-intensive. To this effect, we analyzed the average value of tangible and intangible assets per employee from 2004 to 2008 in each sector.

We noted that, overall, foreign companies are concentrated in more capital-intensive sectors, which implies a higher level of technological development and, respectively, a higher value of assets per employee. Chart 8 shows a notable difference of this indicator between companies without foreign capital or those with a low share of foreign capital in their total capital (from 1% to 25%), and companies with a high share of foreign investment.

Chart 8. Average value of tangible and intangible assets per employee, by foreign capital share in the company, thousand MDL, 2004-2008



Source: authors' calculations based on NBS data.

However, a closer analysis of data revealed high variations by sector. Table 5, with a few exceptions, confirmed that foreign investments which were guided by the costs are traditionally export-oriented, while those attracted due to the favourable conditions of the domestic market are oriented to the local demand (for more details see section 2.3.). Thus, companies with foreign investment in the most capital-intensive sectors (calculated as a ratio of total assets per employee) are oriented towards the domestic market. These companies promote a more intense investment policy (for more details see section 2.4.), which led to a major increase in the asset value over the last years. It is surprising that sectors which were traditionally seen as labour-intensive (financial activities, real estate operations, services provided to companies) fall within this category. Detailed information on capital-intensive and labour-intensive sectors is provided in Annex 3.

On the other hand, sectors with a greater intensity of labour are oriented to foreign markets, and companies in these sectors promote a more passive investment policy. This accounts for the inclusion of some sectors generally seen as capital-intensive in the category of labour-intensive sectors (production of electrical machinery and equipment, production of furniture and other industrial activities, manufacture of machinery and equipment). However, the same

category also includes areas where companies, traditionally operate based on outsourcing contracts, using intensively the local labour (garment industry and repair and dyeing of fur, manufacture of leather, leather articles and manufacture of footwear).

Table 5. Top-10 capital intensive and labour intensive sectors with companies with foreign capital

Most capital intensive sectors			Most labour intensive sectors		
CAEM Code	Description	Value	CAEM Code	Description	Value
I642	Telecommunications	1034889.0	D16	Manufacture of tobacco products	4313.7
E401	Production and distribution of electricity	794493.8	D31	Manufacture of electrical machinery and apparatuses	6113.9
K70	Real estate transactions	318979.3	D18	Manufacture of wearing apparel; dressing and dyeing of fur	7509.7
D37	Recycling of waste and scrap	315919.1	D20	Processing of wood and manufacture of wood products	8457.6
O90	Sewage and refuse disposal, sanitation and similar activities	256493.1	D36	Manufacture of furniture and other industrial activities	10868.0
D26	Manufacture of other non-metallic mineral products	238948.3	D153	Processing and preserving of fruit and vegetables	12098.28
A012	Farming of animals	169702	D19	Manufacture of leather, leather products and shoes	14404.13
J65	Financial activities	151881.8	D21	Manufacture of paper and paperboard	17205.48
K74	Other business support service activities	149660.8	K72	Computers and related activities	17441
D154	Manufacture of vegetable and animal oils and fats	149660.8	D29	Manufacture of machinery and equipment	18433.63

Source: authors' calculations based on NBS data;

Table 6. Top-10 sectors by average asset value per company with foreign capital

	CAEM Code	Description	Total assets per company, MDL	Share of foreign capital in the total capital, %
1	E402	Manufacture and distribution of gas fuel	3,092,055,419	28.3
2	E401	Production and distribution of electricity	912,277,023	51.2
3	D26	Manufacture of other non-metallic mineral products	180,641,594	44.9
4	J65	Financial activities	116,448,942	31.1
5	D159	Manufacture of beverages	112,909,484	27.4
6	I642	Telecommunications	106,933,437	16.0
7	D21	Manufacture of paper and paperboard	84,173,841	61.4
8	D158	Manufacture of other food products	74,750,018	30.1
9	D23	Manufacture of coke, refined petroleum products and nuclear fuel	69,475,358	66.1
10	G50	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of fuel	46,863,326	53.4

Source: authors' calculations based on NBS data.

It is not surprising at all that capital-intensive sectors are in the top of sectors with the highest value of assets per company with foreign capital. They are represented, in particular, by the energy sector (Table 6) with such giant companies as "Moldova Gaz" SA (Russian ownership) and "Red Union Fenosa SA (Spanish ownership). At the same time, the solid growth of FDI in financial activities (banking, insurance and leasing sectors) in 2007-2008 lead to the advancement of this type of activity in the top. In the manufacture of beverages, a major impact was noted for the activity of production of alcoholic beverages (wine, beer), and in telecommunication sector – by the companies "Orange Moldova" SA and "Moldcell" SA. Complete information on company size (total assets per company) is presented in Annex 2.

This analysis allows us to conclude that the key factors that attracted the largest investment in Moldova over the last years were the privatization programmes or projects aimed at converting debt into shares (particularly, in the energy sector) and favourable conditions of the domestic market (financial activities and telecommunications). At the same time, another key factor that attracted foreign companies in Moldova is the low cost of labour, particularly, as compared to Central and Southeast Europe and Russia. Thus, the average monthly salary per employee in 2009 in Moldova amounted to about 174 euros, while in Ukraine it was 198 euros, in Russia – 481 euros, and in Romania – 447 euros⁷.

⁷ Data provided by the National Bureaus of Statistics of the respective countries.

CHAPTER 2.

IMPACT OF FOREIGN DIRECT INVESTMENTS ON THE MOLDOVAN ECONOMY

2.1. FDI impact on the economic growth

Although the Republic of Moldova is among the “laggard” states according to the FDI stock per capita (USD 720 per capita in 2008, as compared to the average USD 826 in the CIS countries, the average USD 2406 for all transition countries and USD 4335 in the Central and East Europe countries that joined EU), their beneficial role on the Moldovan economy may not be ignored. First, there are several sectors which developed almost exclusively thanks to the FDI and where their current share is higher than 50% (Table 7).

Table 7. The share of foreign capital in the economic sectors with over 20% of foreign capital (%), 2008

CAEM Code	Description	Foreign capital share in the sector, %
D35	Manufacture of other transport equipment	93.4
D18	Manufacture of wearing apparel; dressing and dyeing of fur	66.8
D23	Manufacture of coke, refined petroleum products and nuclear fuel	66.1
D21	Manufacture of paper and paperboard	61.4
G50	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of fuel for transport vehicles with internal combustion engine	53.4
E401	Production and distribution of electricity	51.2
D26	Manufacture of other non-metallic mineral products	44.9
H55	Hotels and restaurants	35.7
G51	Wholesale trade and commission trade, except of motor vehicles and motorcycles	34.0
D19	Manufacture of leather, leather products and shoes	31.5
J65	Financial activities	31.1
D158	Manufacture of other food products	30.1
D24	Chemical industry	28.5
E402	Manufacture and distribution of gas fuel	28.3
K70	Real estate transactions	27.5
D25	Manufacture of rubber and plastic products	28.2
D159	Manufacture of beverages	27.4
D25	Manufacture of rubber and plastic products	27.4
D155	Manufacture of dairy products	26.9
K71	Renting of machinery and equipment without operator and of personal and household goods	24.6
D29	Manufacture of machinery and equipment	21.7
D152	Processing and preserving of fish and fish products	21.3

Source: The authors' calculations on the basis of the data provided by the NBS.

These also include sectors that have a direct and vital impact on the normal operation of the entire economy. Thus, the foreign investor's participation in the privatization of the electricity production and distribution sector solved the problem of mutual debts in the sector and prevented it from worsening, as it happened in the thermal energy production and distribution sector. However, the electricity production and distribution sector, though dominated by foreign capital, is represented only by one business organization with large foreign investment. The situation is similar in the "manufacture of coke, refined petroleum products and nuclear fuel" sector, where there are only two foreign companies, or the "manufacture of cement" sector, where there is one large manufacturer with foreign capital. Another example of an economic sector that was created by foreign investors virtually from scratch is given by mobile telecommunications, represented by two joint ventures (plus one company with state capital).

Yet, other economic sectors are less concentrated around one single large foreign investor. In some sectors currently dominated by FDI, such as manufacture of wearing apparel, foreign investors came later, but were more numerous. In this sector the foreign direct investments increased after 2004 and were caused by investments in outsourced enterprises, for which Moldova was attractive due to its cheaper labour force as compared to the European countries.

Besides the sectors dominated by foreign capital, there are also other sectors attractive for investors, although they have a smaller share of foreign investments. Table 7 shows all sectors where the FDI share in the total authorized and additional capital is over 20% at the sector level. They include some traditional sectors for the Moldovan economy, such as production of beverages, dairy products. At the same time, most branches of the food industry, regarded during the Soviet period as a very competitive sector, did not attract important foreign investments, whose share in the sector is relatively low (Table 8).

In the agricultural sector, another traditional sector for the Moldovan economy, the foreign investments also were and remain very low. This is a direct consequence of the limitations imposed on the procurement of agricultural land by foreign investors, which hindered the full use of the most valuable natural resources of the Republic of Moldova - its fertile soil. Thus, in the crops growing sector only 5.5% of capital is foreign, while in the farming of animals sector - only 0.62%. We do not expect the foreign investors to be attracted by these sectors as long as they cannot own the fundamental element of the technological process - the agricultural land.

At the same time, there are a few sectors that were not attractive at all for FDI, including some whose development was based totally on cutting edge technologies and the human capital with the highest qualification. Examples of such sectors omitted from the agenda of foreign investors are the manufacture of medical, precision and optical instruments, watches and clocks, the manufacture of radio, television and communication equipment and apparatus and the manufacture of office machinery and computers.

Table 8. The share of foreign capital in the economic sectors with less than 20% foreign capital, 2008, % in the total capital for each sector

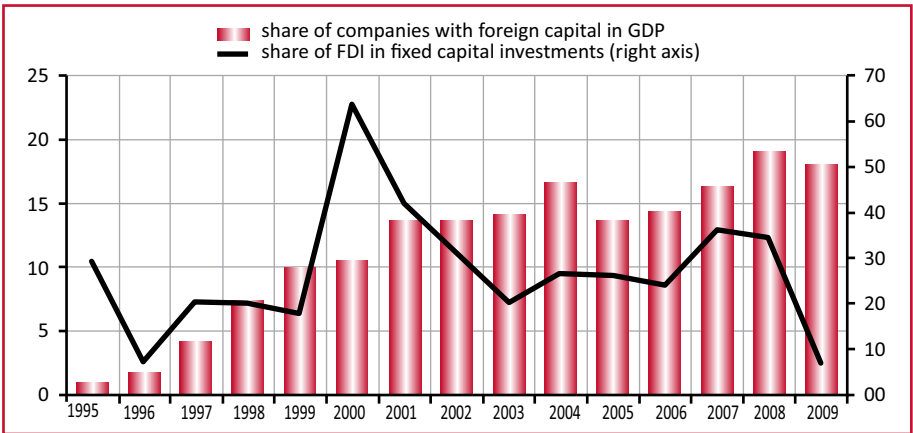
CAEM Code	Description	Share
O92	Recreational, cultural and sporting activities	18.6
I642	Telecommunications	16.0
G52	Retail trade; repair of personal and household goods	13.3
D22	Publishing, printing and reproduction of recorded media	13.2
K74	Other business support service activities	12.2
D151	Processing and preserving of meat and production of meat products	9.6
D17	Manufacture of textiles	8.2
I63	Other supporting transport activities; travel agency activities	8.1
A013	Growing of crops combined with farming of animals	7.7
D37	Recycling	7.6
K72	Computers and related activities	6.7
A014	Agricultural and animal husbandry service activities, except veterinary activities	5.5
A011	Production of crops	5.5
D20	Manufacture of wood and wood products	5.2
D154	Manufacture of vegetable and animal oils and fats	4.3
D36	Manufacture of furniture and other industrial activities	4.1
I62	Air transport	3.1
D31	Manufacture of electrical machinery and apparatuses	3.0
O93	Private service activities	2.6
D156	Manufacture of grain mill products, starches and starch products	2.2
D153	Processing and preserving of fruit and vegetables	2.1
F45	Construction	1.9
O90	Sewage and refuse disposal, sanitation and similar activities	1.9
I60	Land transport	1.7
D16	Manufacture of tobacco products	1.4
D28	Manufacture of fabricated metal products, except machinery and equipment	1.3
A012	Farming of animals	0.6
O91	Activities of membership organizations	0
D33	Manufacture of medical, precision and optical instruments, watches and clocks	0
I641	Post and courier activities	0
K73	Research and development	0
C1	Mining and quarrying	0
D32	Manufacture of radio, television and communication equipment and apparatus	0
A02	Forestry, logging and related service activities	0
B05	Fishing and fish farming	0
D157	Manufacture of prepared animal feeds	0
D27	Manufacture of basic metals	0
D30	Manufacture of office machinery and computers	0
D34	Manufacture of motor vehicles	0

CAEM Code	Description	Share
E403	Steam and hot water supply	0
E41	Collection, purification and distribution of water	0
I61	Water transport	0

Source: The authors' calculations on the basis of the data provided by the NBS.

Not only the analyses based on sector data, but also statistics from ordinary publications of the NBS show that the FDI had a major role as the engine of economic growth in Moldova. Thus, the average share of foreign investments in the total gross investments in fixed assets per economy increased from 18.9% in 1995-1999 to 29.8% in 2000-2004 (36.7% if we include "Union Fenosa" effect in 2000) and to 30.1% in 2005-2008. The essential role of FDI in the economic growth in Moldova is also shown by a considerable and almost constant growth of the joint ventures and foreign companies' share in the GDP from 4.9% in 1995-1999 to 10.4% in 2000-2004 and to 15.2% in 2005-2008 (Chart 9). In the context of the global financial crisis the FDI share in the gross investments in fixed assets decreased to 7.1%, yet, according to our estimations, the share of joint ventures and companies with foreign capital in the GDP did not change significantly.

Chart 9. The evolution of the share of companies with foreign capital in the GDP and of FDI share in financing the gross investments in fixed assets, % of the total.

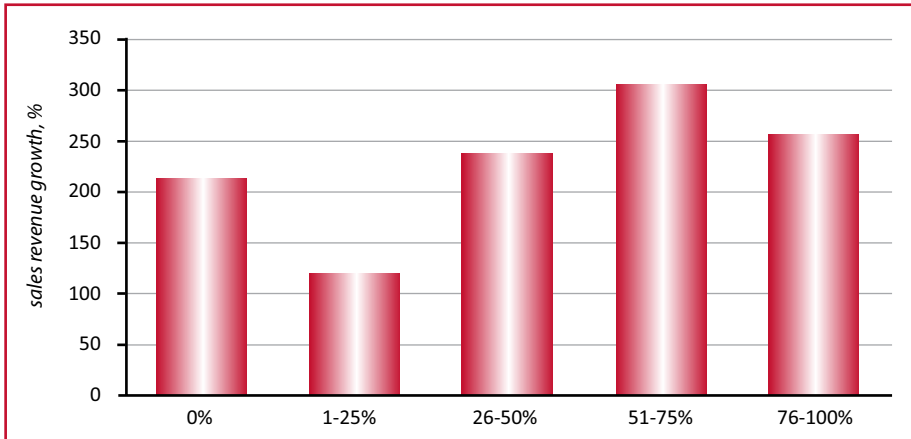


Sources: The authors' calculations on the basis of the data provided by the NBS.

Using the data provided by the NBS for this study we analyzed the FDI contribution to the economic growth from the perspective of the increase in the sales revenue, depending on the share of foreign capital both at the level of the entire economy and at the level of the economic sectors. This allows to identify the sectors where the FDI had a major role in relation to those where the FDI contribution was insignificant. At the level of the entire economy, between 2004 and 2008 the sales revenue of the companies with foreign capital increased 2.5 times⁸, as compared to a 2.1-fold increase in the revenues of local companies. A more significant growth rate was registered among the foreign companies, where the foreign investor does not participate only formally, but the share of foreign capital is over 25% (Chart 10).

⁸ Hereinafter the increasing and decreasing rates are reflected in their nominal value, as Expert-Group did not have enough disaggregated data on industrial prices indexes required to calculate the real growth.

Chart 10. The growth of sales revenues in 2004-2008 depending on the foreign capital share in the company's capital, %



Source: The authors' calculations on the basis of the data provided by the NBS.

The sectors with the strongest increases in the sales revenues during 2004-2008 are the ones with a relatively high share of FDI (Table 9). Moreover, there are sectors where the sales revenues increased almost exclusively thanks to the entry of foreign investors on the Moldovan market. This is the case of refined petroleum products, where 2 companies with foreign capital contributed to an important increase of sales revenues in this sector.

Table 9. The economic sectors with the highest increase in sales revenues, 2004-2008.

CAEM Code	Description	Increase in sales revenues, times	Share of the foreign capital, %
D23	Manufacture of coke, refined petroleum products and nuclear fuel	53	66.1
D35	Manufacture of other transport equipment	8.3	93.4
J65	Financial activities	6.8	31.1
G50	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of fuel for transport vehicles with internal combustion engine	4.6	53.4
D152	Processing and preserving of fish and fish products	3.7	21.3
D24	Chemical industry	3.7	28.5

Source: The authors' calculations on the basis of the data provided by the NBS.

However, a disaggregated analysis by economic sectors reveals that not in all sectors the sales revenues of the companies with foreign capital increased very much as compared to those of local companies. In the food industry on the whole, the manufacture of textiles, manufacture of wood and wood products, manufacture of paper and paperboard and in the manufacture of other transport equipment the local companies registered more significant increases in the sales revenues as compared to the foreign companies.

At the level of the entire processing industry there is no important positive correlation between the increase in the amount of production by sectors and the share of foreign capital in the companies. Thus, even if in the food industry branches the share of foreign investments was lower than in the non-food industry, the high internal demand for food products over the past years contributed to an increase in the sales revenues in the sector to the same extent as in the non-food sectors.

2.2. Competitiveness of the companies with foreign capital versus the local companies

It is often said that companies with foreign capital or joint ventures are necessarily more competitive than the local ones. To analyze the validity of this argument, we used two indicators reflecting the competitiveness level: 1) the market penetration compared to the share of foreign capital in the sector and 2) the sales per employee.

The existing data do not allow establishing a simple correlation between the sales penetration on the market and the share of foreign capital, the situation varying from sector to sector (Table 10).

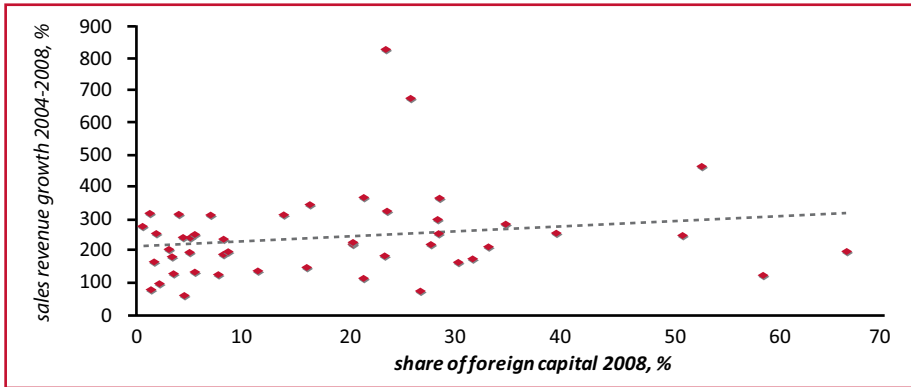
Table 10. The economic sectors according to the relation between the sales penetration on the market and the share of foreign capital

The sales entry on the market lower than the share of foreign capital at the sector level		The sales entry on the market higher than the share of foreign capital at the sector level	
CAEM Code	Description	CAEM Code	Description
D23	Manufacture of coke, refined petroleum products and nuclear fuel	D26	Manufacture of other non-metallic mineral products
D21	Manufacture of paper and paperboard	E402	Manufacture and distribution of gas fuel
E401	Production and distribution of electricity	D159	Manufacture of beverages
D155	Manufacture of dairy products	J65	Financial activities
D35	Manufacture of other transport equipment	K71	Renting of machinery and equipment without operator and of personal and household goods
D29	Manufacture of machinery and equipment	D152	Processing and preserving of fish and fish products
H55	Hotels and restaurants	I642	Telecommunications

Source: The authors' rating on the basis of the data provided by the NBS.

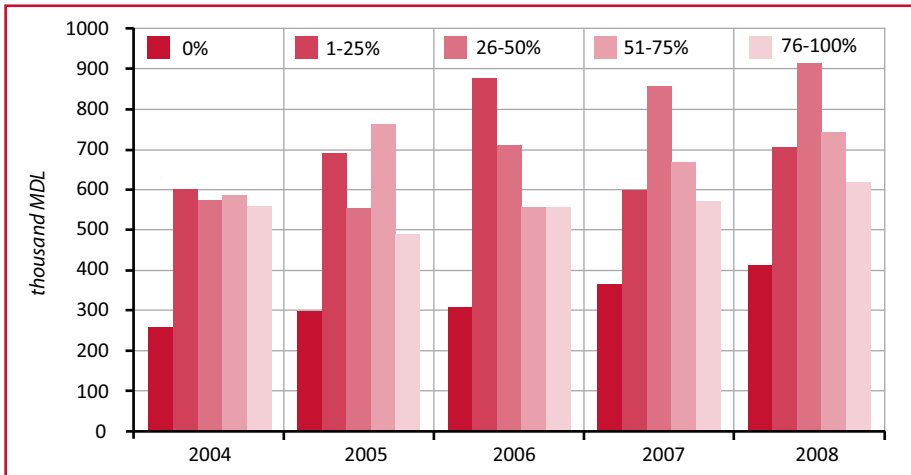
The sales revenues per employee represent another important indicator for the analysis of the companies' market position, determining their competitiveness and the efficiency of marketing policies. At the level of the entire Moldovan economy there is a quite poor correlation between the sales revenues per employee and the share of foreign capital in the economic sectors (Chart 11).

Chart 11. The correlation between the share of foreign capital in the capital of the companies and the sales revenue per employee, 2008



Source: The authors' calculations on the basis of the data provided by the NBS.

Chart 12. The sales revenue per employee by groups of enterprises in accordance with the share of foreign capital in the company's capital, thousand MDL



Source: The authors' calculations on the basis of the data provided by the NBS.

But such a relation is visible at the level of groups of companies in accordance with the share of the foreign capital. Thus, between 2004 and 2008, the companies with foreign capital recorded constantly higher sales revenues per employee than the local companies as a whole per economy (Chart 12), as well as at the level of most sectors (see Annex 1). This correlation is valid for all economic sectors except for the food industry as a whole, manufacture of textiles, manufacture of wood and of products of wood, where the local companies registered higher sales revenues per employee than the companies with foreign capital or joint ventures. In these sectors, the local manufacturers were more competitive, probably due to the longer

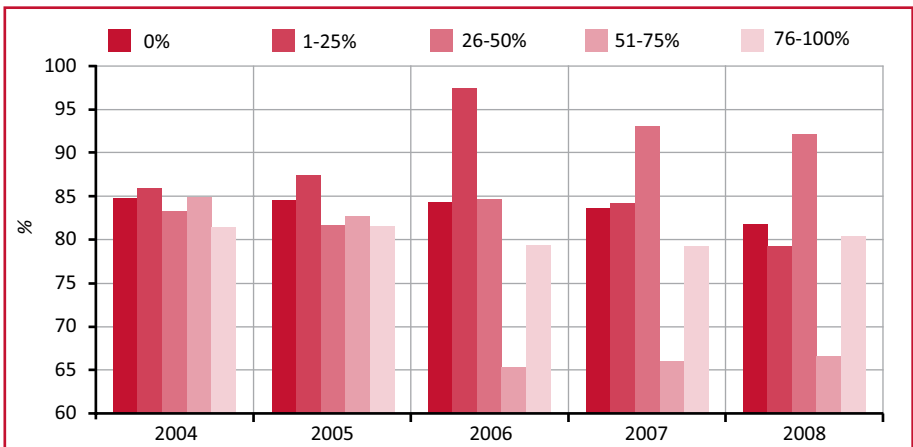
experience on the Moldovan market and knowledge of the local market. Another explanation is that in some sectors (for example manufacture of textiles), the local companies generate value added, and are not only integrated in value chains of the foreign companies on the basis of outsourcing arrangements.

Thus the analysis shows that the foreign companies tend to be better positioned on the local market, their marketing policies are more efficient, and on average they are more competitive. This refers both to the economy as a whole, and to most economic sectors apart. Nevertheless, there are some sectors where the local companies are still more competitive.

2.3. FDI and efficiency of corporate management

The efficiency of sales is analyzed by using such indicators as the ratio of production cost to the total sales and inventory turnover. The analysis of the share of production cost in the total sales revenues proved that the companies with majority share of foreign capital incurred lower costs per unit of sold product/service during the past years (Chart 13). It is worth mentioning that the foreign companies managed to attain such a progress though paying higher salaries to their employees, which influences the total cost of sales. This can be explained by the scale production effect, which results from the fact that the companies with foreign capital tend to be larger than the local ones. This allows them developing more extensive production lines, increasing the production amount, which is usually associated with lower unit costs. Ultimately, this allows the foreign companies being more price competitive and gaining territory against the local ones.

Chart 13. The share of costs in the total sales revenues according to the share of foreign capital in the company's capital, %



Source: The authors' calculations on the basis of the data provided by the NBS.

The lowest unit costs are incurred in the telecommunications sector, on the average 53.9% of sales in 2008, and the costs incurred by local companies are significantly higher than those incurred by the companies with foreign capital. Other sectors, with major differences between the sales efficiency of the companies with foreign capital and the local ones (see more details in Annex 4):

- ◆ Manufacture of other transport equipment;
- ◆ Manufacture of furniture and other industrial activities;
- ◆ Financial activities;
- ◆ Chemical industry;
- ◆ Retail trade; Repair of household goods;
- ◆ Construction.

In all these sectors, the efficiency of sales enhanced with the increase in the share of foreign capital in companies. This performance is determined by the relatively higher level of technological upgrading, as well as the relatively large sizes of the foreign companies, and, respectively, the scale production effect. Another reason is the efficiency of the marketing strategies that influences the company's market positioning and penetration, which influences the efficiency of sales.

At the same time, there is a range of sectors where the companies with foreign capital had a lower efficiency of sales, if compared with the local companies. These sectors include:

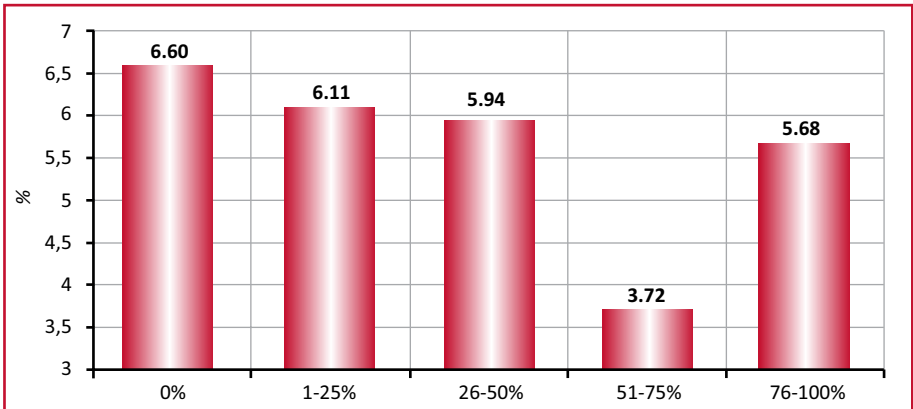
- ◆ Production of crops;
- ◆ Processing and preserving of fruit and vegetables;
- ◆ Land transport;
- ◆ Other supporting transport activities; Travel agency activities;
- ◆ Real estate transactions.

Analyzing the shares of foreign capital in the companies from the above-mentioned sectors, we can see that, with little exception, the most attractive sectors for foreign investors also had a higher efficiency of sales. At the same time, in the sectors that developed mostly on the basis of local capital, the companies with foreign capital had higher unit costs.

Another indicator of management efficiency is the inventory management, which impacts the companies' solvency. The solvency is influenced by the inventory turnover speed, this being calculated as the ratio of the amount of sales to the value of inventory. Chart 14 reveals a negative correlation between the share of foreign capital in companies' capital and speed of inventory turnover. The corporate management theory would conclude from this that the companies with foreign capital prove a less efficient management of stocks and/or face more problems with respect to sales markets. But this conclusion doesn't fit the reality very well, especially taking into account that the companies with foreign capital have higher sales per employee. The reason of this apparent paradox is the size of companies' inventories. As the local companies are usually smaller and have lower sales revenues per employee, they are not oriented towards accumulating large inventories. At the same time, the companies with foreign capital, having a higher turnover, have a different policy related to inventory management, which allows accumulating higher amounts of inventories and storing them for longer time. Respectively, the inventory turnover rate is lower in these companies.

However, the respective rate fits into admissible values from the financial point of view, being higher than the minimal needed level (5 units, dimensionless indicator). An exception is the category of companies with the share of foreign capital from 51% up to 75%, but a small number of companies fit into it. Consequently, a slower inventory turnover noticed about the companies with foreign capital seems to be quite normal for their size. Moreover, in most cases the companies with foreign capital can benefit of more external funding sources for the operating funds, which allows maintaining the amount of the respective inventory.

Chart 14. Average inventory turnover rate in 2004-2008, by the share of foreign capital in the company's capital, %



Source: The authors' calculations on the basis of the data provided by the NBS.

Table 11. Distribution of sectors by the evolution of inventory turnover rate according to the share of foreign capital in companies

The inventory turnover ratio increases with the increase in the share of foreign capital	The inventory turnover ratio decreases with the increase in the share of foreign capital
Farming of animals	Manufacture of dairy products
Processing and preserving of fruit and vegetables	Manufacture of other food products
Manufacture of textiles	Chemical industry
Manufacture of wearing apparel; dressing and dyeing of fur	Manufacture of rubber and plastic products
Manufacture of wood and of products of wood	Manufacture of fabricated metal products, except machinery and equipment
Publishing, printing and reproduction of recorded media	Manufacture of furniture and other industrial activities
Manufacture of other non-metallic mineral products	Construction
Manufacture of machinery and equipment	
Manufacture of machinery and electrical appliances	
Other activities and services, provided mainly to businesses.	

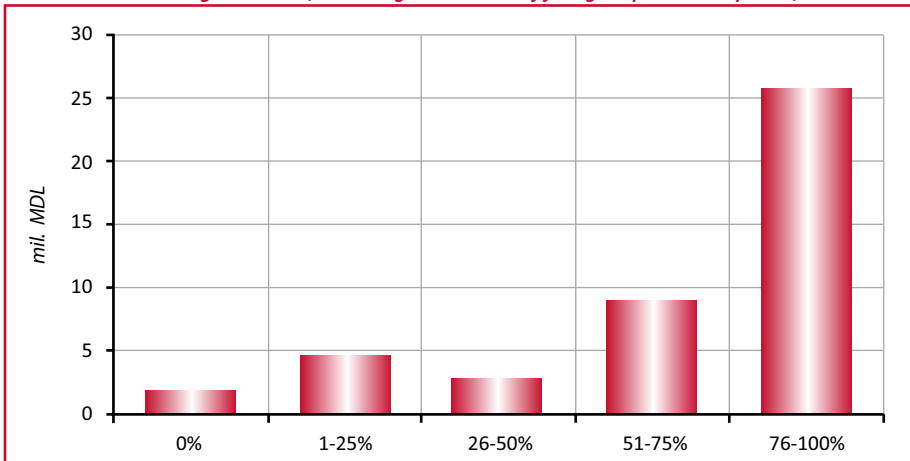
Source: The authors' calculations on the basis of the data provided by the NBS.

Obviously, this situation is not common for all sectors (Table 11). Thus, in the export oriented sectors (e.g. textiles, wearing apparel, machinery and equipment, electrical appliances), the companies with foreign capital have higher inventory turnover rates than the local ones (see more details in Annex 5). This is probably explained by the fact that the companies with foreign capital have more contacts established with the overseas buyers and, respectively, face fewer difficulties with respect to the external sales market. On the other hand, in a range of sectors, the companies with foreign capital have slower inventory turnover, either because they have, as mentioned above, different inventory management policies than the local companies, or because of the problems related to the sale of products.

2.4. Influence of foreign capital over the corporate investment

As a whole, the companies with foreign capital promote a more active investment policy and this influences, in turn, the extension of these companies both in terms of size (value of company's assets), and in terms of scale production (amount of company's production). The better economic performance of the companies with foreign capital, as well as the wider access to the external funding sources determined a higher average value of the tangible and intangible asset inputs into the companies with foreign capital during the past years (Chart 15). The companies with the largest shares of foreign capital (76-100%) obtain about 5 times more investments than the other companies, while the companies that work totally on the basis of local capital obtain an insignificant amount of investments (about MDL 1.9 million).

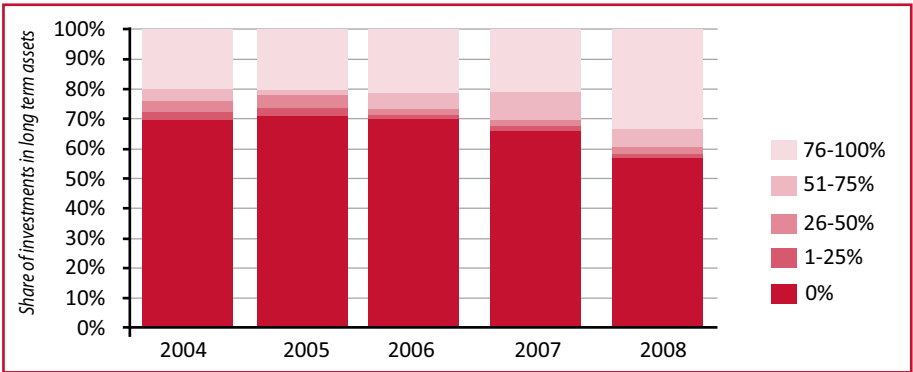
Chart 15. The average value of the inputs of tangible and intangible assets per company during 2004-2008, according to the share of foreign capital in companies, million MDL



Source: The authors' calculations on the basis of the data provided by the NBS.

The existence of foreign capital has thus a significant impact over the companies' investment activity. In 2008, the share of investment in tangible and intangible assets of foreign companies accounted for 43% of the total investments of all companies at the level of entire economy. This is a significantly higher level if compared to the share of foreign capital in the economy. However, the investments into the tangible and intangible assets of companies with foreign capital increased significantly only in 2008; their level accounting for about 30% before that year (Chart 16). The investments of companies with majority foreign capital (76-100%) grew most quickly, showing that these companies are mostly inclined to extend their activity.

Chart 16. Structure of investments in long term assets, at the level of the entire economy, by groups of companies according to the share of foreign capital in companies, %

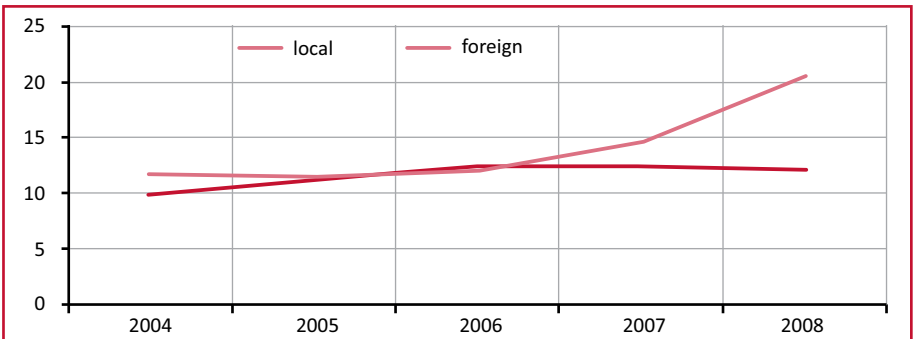


Source: The authors' calculations on the basis of the data provided by the NBS.

Moreover, if we analyze the inputs of intangible assets, we find out that in 2008, 70% of them belonged to the companies with foreign capital. This is mainly due to the plenty of companies with foreign capital in the IT field in the Republic of Moldova. Although the number of foreign companies in the IT sector and related activities accounts for 21.6% of the total number of enterprises from this sector (86 of 398 registered enterprises), these enterprises are larger on the average (in terms of assets value) and extended mainly during the past years.

At the level of entire economy, the share of inputs of tangible and intangible assets in the total assets stagnated for the local companies, while the same indicator kept rising for the foreign companies, exceeding significantly the local enterprises (Chart 17). But this happens mostly on the basis of input of assets in the companies with over 50% of foreign capital; the other joint ventures were not more efficient than the local ones with respect to obtaining long term assets.

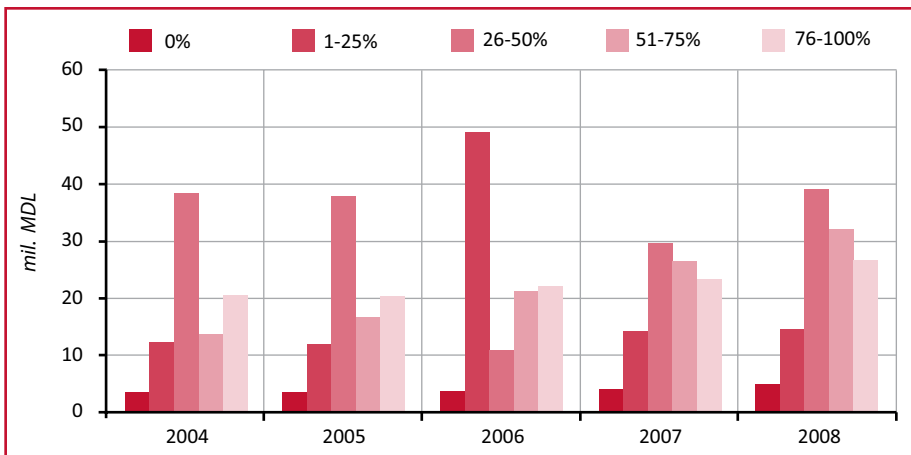
Chart 17. The share of long term assets input in the total assets in the local companies and those with foreign capital, %



Source: The authors' calculations on the basis of the data provided by the NBS.

The analysis of data on the value of assets owned by the companies reveal that the companies with foreign capital are bigger, having a greater value of assets on their balance sheet in comparison with the local ones (Chart 18). Consequently, they have available a wider range of tools which allow them being more competitive on the market, employing a larger number of persons, and implementing more investment projects. During the past years, the respective indicator increased more or less steadily, except for the groups where the foreign capital accounts for 51-75% and 76-100%. Therefore, the acceleration of foreign investment flows determined the increase of the size of companies with foreign capital, highlighting thus the increasing importance of foreign investments for the national economy of the Republic of Moldova. At the same time, a greater value of assets is an advantage in the competition for credit resources from the commercial banks. Thus, the companies with foreign capital can benefit of a greater confidence on the part of the local banks, having more access to capital, taking into account the bigger value of the assets that can serve as collateral. Even if they have more access to cheaper foreign capital, the advantages of their size allow the companies with foreign capital to easier contract bank credits, if they need it.

Chart 18. Value of assets per company, by the share of foreign capital in the company, during 2004-2008, million MDL



Source: The authors' calculations on the basis of the data provided by the NBS.

Nevertheless, not in all sectors this correlation can be perceived, such as the ones that during the past years developed mainly on the basis of local capital. Thus, the size of local companies specialized in the manufacture, processing, and preserving of meat and meat products, manufacture of tobacco products, recycling, and air transport is greater than of those with foreign capital. At the same time, there are some sectors where, even if more foreign capital is placed, the local companies are bigger than those with foreign capital, except those having a 76-100% share of foreign capital. They are: manufacture of dairy products, manufacture of vegetable and animal oils and fats, manufacture of furniture and other industrial activities. For more details see Annex 2. As a whole, the mentioned sectors fell out of the foreign investors' interest area both because of some anti-competition arrangements on some market segments, established both because of the indifference of state regulators, and because of the small sales market and lack of competitive advantages towards other states from this region.

Table 12 suggests that the foreign direct investments recorded in the Republic of Moldova during the past years can be classified into 2 large categories: cost-driven investments oriented towards exports and market-driven investments oriented towards the internal demand. Therefore, you see on the left part of the table a series of sectors oriented mainly towards the internal market: telecommunications, manufacture of dairy products, manufacture and distribution of gaseous fuels, financial activities, air transport, real estate transactions, which recorded the greatest investments per company during the past years. At the same time, the lowest investments per company were recorded in the following sectors: manufacture of other transport equipment, computers and related activities, manufacture of furniture, which are mainly oriented towards export, and were included in the right part of the table. The only exceptions were the sectors where the share of foreign capital is insignificant: land transport, private service activities, recycling.

Table 12. Top 10 sectors with highest and lowest investment per company, average value for 2004-2008

Top 10 sectors with highest investment per company			Top 10 sectors with lowest investment per company		
CAEM Code	Description	Value, MDL	CAEM Code	Description	Value, MDL
E401	Production and distribution of electricity	364102363.4	D16	Manufacture of tobacco products	235429.2
I642	Telecommunications	49569770.2	K71	Renting of machinery and equipment without operator and of personal and household goods	256125.8
D26	Manufacture of other non-metallic mineral products	29791670	K72	Computers and related activities	300709.6
D159	Manufacture of beverages	13770083.1	D35	Manufacture of other transport equipment	335655.1
E402	Manufacture and distribution of gaseous fuels	9661831.5	D36	Manufacture of furniture and other industrial activities	362115.7
D155	Manufacture of dairy products	9506753	D23	Manufacture of coke, refined petroleum products and nuclear fuel	379123
K70	Real estate transactions	7353438.4	D20	Manufacture of wood and wood products	380544.4
D158	Manufacture of other food products	6695782.9	D37	Recycling	396877
J65	Financial activities	5778184.9	O93	Private service activities	541984.3
D21	Manufacture of paper and paperboard	5479013.3	I60	Land transport	779376.2

Source: The authors' calculations on the basis of the data provided by the NBS.

As a conclusion, the companies with foreign capital are bigger and promote a more active investment policy if compared with the local companies. The greater scale production, the better economic performance, and greater access to external funding sources allowed the

companies with foreign capital to record much higher values of tangible and intangible assets inputs during the past years. It was proved at the same time that, with some exception, the companies oriented towards the internal demand promote a more active investment policy than those that are mostly oriented towards export.

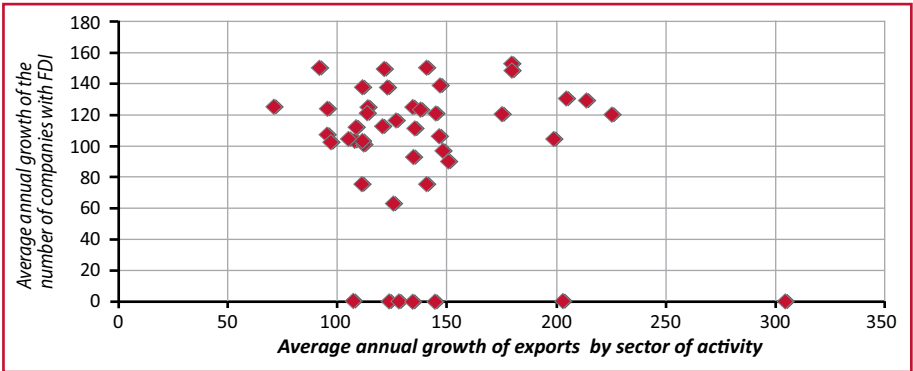
2.5. Impact of FDI on the external trade (exports)

When planning this study, Expert-Grup thought that it could obtain from the National Bureau of Statistics data from the financial statements at the enterprise level (encoded so that the anonymity is maintained), integrated by means of the taxpayer's ID code, with the data from the customs declarations of the respective companies. This set of data would allow analyzing the impact of FDI over the external commercial flows of the country and more or less accurate identification of the direction and intensity of interrelations. But, because of various reasons, these data could not be obtained, that's why the analysis is mostly based on the connection Expert-Grup determined on its own between the activity sectors (on the basis of the Classification of Activities in the National Economy) and groups of merchandise (on the basis of Standard International Trade Classification) and the exported services (on the basis of Classification of Services in the Balance of Payments). The establishment of this connection is based on the realist hypothesis that the types of activities have specific merchandise that they export. The same way of thinking cannot be applied to the imports, because the relation between the imported intermediary goods and the types of activities is less clear. In the category of exported goods we considered only the agriculture and industry sectors, and in the exported services category - the branch of computers and related activities. Annex 6 shows the relation among those groups of merchandise and activity sectors for which was possible to determine this connection. Obviously, the relation between the activity sectors and the groups of merchandise and services sold internationally is approximate, that is why our conclusions are also quite cautious.

Nevertheless, the performed analysis allows stating some things. Thus, there exists a very close connection between the export value of an economic sector and the number of companies with foreign capital that operate in the respective sector (relation between the export value and share of FDI in the respective sector is almost equal to zero). The political intervention of this connection could be obvious: the Government must ensure the coming of as many as possible companies with foreign capital if it wants to increase the value of exports. But it is obvious that this connection is obvious in arithmetical terms (by definition, the more companies in a sector, the more exports from this sector), rather than economic.

In many sectors, the increase in the number of companies with foreign capital was actually accompanied by an increase in exports. For instance, in 2004-2008, the increase in the export of plastic items (219%) was accompanied by a large increase in the number of companies with FDI that operate in the respective sector (from 14 in 2004, up to 30 in 2008). The IT services sector is another similar example, where the average annual 80% increase of the exports was accompanied by an average annual 48% increase in the number of companies with foreign capital. Another interesting sector is the export of metallic items: in 2005-2008 the average annual value of the respective exports increased by 80% and the number of companies increased from 5 in 2004 up to 24 in 2008. But not all sectors were that quick in increasing the export. For example, the export of wearing apparel and accessories increased annually by 14% on the average, while the number of companies with FDI increased 2.4 times - from 28 units in 2004 up to 67 in 2008. You can see more information on the value of exports and number of companies with foreign capital in Annex 7.

Chart 19. Increase in the number of companies with FDI and increase in the value of exports



Source: The authors' calculations on the basis of the data provided by the NBS.

It is obviously difficult to establish the direction of the causal link on the basis of imperfect data (see the first paragraph of this chapter), especially taking into account that this correlation seems to be too weak (Chart 18). For example, the increase in the number of companies with foreign capital in the manufacture of beverages did not stop the decline of exports, caused by very strong external factors (the embargo imposed by the Russian Federation on the import of alcoholic beverages from the Republic of Moldova). On the other hand, the disappearance of companies with foreign capital from the sector of "articles of leather and dressed fur" did not hinder the significant increase in the exports from this sector. We can say the same about the sector of "appliances for telecommunications, TV, audio, video" In other words, neither the number of companies with foreign capital per year, nor the increase in the number companies or a longer term explain good enough the increase of exports in the national economy a whole.

2.6. Influence of FDI on local producers

The foreign direct investment may have various effects on the national producers. For instance, horizontally, the foreign companies or joint ventures may have both positive and negative effects. The positive effects are achieved if the foreign companies' know-how is ultimately learned and assimilated by the local companies (including through the labour force and management staff flow from foreign companies to the local ones). But the level effects may also be negative if the foreign companies coming in the country target especially the internal market and engage in a strategic competition with the local companies, with the latter very likely to fail the competition. Vertically, the FDI may have positive effects if their coming leads to the emergence of new technology chains, as part of which the local providers and clients benefit of an increased efficiency of the companies with foreign capital. Yet, the FDI may also have negative vertical effects if these companies prefer to work with external providers and clients, being attracted especially by a lower cost of certain local factors of production (especially the labour force).

We analyzed the horizontal effects by comparing the evolution of the number of companies with foreign capital with the sales per employee of the local companies. The available statistics covered too short a period of time (2004-2008) and were not detailed enough to allow formulating clear conclusions in respect to the vertical effects of FDI. For that reason, we tried to study the vertical effects through two case studies: "wearing apparel" and the "beverages" cluster.

Horizontal effects of FDI

The conducted analysis allows the identification of a few relevant sectors, where the sales of the local companies are affected negatively by the number of companies with foreign capital present in the sector. Thus, the decrease of the number of companies with foreign capital in the “manufacture of wood and wood products” sector seems to have influenced positively the increase in the local companies’ sales. An explanation confirmed by statistics is that local companies from this sector lose their labour force in favour of those with foreign capital. Perhaps, a certain negative relation, though weaker in intensity, exists also in the “manufacture of electrical machinery and apparatuses” sector. The increase in the number of foreign competitors (from 2 in 2004 to 5 in 2007) seems to be somehow inconvenient for Moldovan companies from the “manufacture of paper and paperboard” sector too (for more details see Annex 8). In these two sectors an exodus of workers from Moldovan companies is noticed as well. The situation seems to be similar in the “processing and preserving of fruit and vegetables” sector, with even stronger outflow of workers and it was not compensated by the renewal of equipment.

However, in most sectors no “hunting” behaviour of the companies with foreign capital towards local competitors is noticed. Table 13 includes the top 10 branches where the increase in the number of companies with foreign capital was accompanied by a strong increase of both the number of local companies and the sales per employee of the local companies. Of course, we do not pretend that the positive evolution of local companies occurred only because they felt the foreign competitors’ “icy breath”, which made them more competitive. Ultimately, all sectors of Moldovan economy are far from saturation in terms of number of players as yet and they will keep on developing long in the future. However, it seems there are several level channels through which the presence of companies with foreign capital influences positively the local companies. Many local companies imitate and adopt the marketing strategies (such as the trade, hotels and restaurants related activity), others probably notice and adopt technological innovations (constructions, telecommunications). Besides, there seems to be a staff flow, especially at the management level, which ensures the passage of skills learned in companies with foreign capital to the local ones.

Generalizing at the level of the whole economy, we can state that the level effects of the companies with the FDI are positive, their increase in number creating certain positive effects on their local competitors.

Table 13. Top 10 major branches (>10 companies with foreign capital) with positive horizontal effects of the foreign direct investments

Code	Description	Indicator	2004	2005	2006	2007	2008
K74	Other business support service activities	number of companies with FDI	72	88	119	163	189
		number of local companies	945	1045	1182	1386	1585
		annual sales per employee in local companies, MDL	90029	110644	130257	151610	177684
G52	Retail trade; repair of personal and household goods	number of companies with FDI	108	123	133	169	187
		number of local companies	3696	4141	4629	5324	5856
		annual sales per employee in local companies, MDL	157220	183736	211097	240461	283485

Code	Description	Indicator	2004	2005	2006	2007	2008
D28	Manufacture of fabricated metal products, except machinery and equipment	number of companies with FDI	5	11	13	18	24
		number of local companies	222	256	287	334	376
		annual sales per employee in local companies, MDL	101957	109068	136448	181686	260095
H55	Hotels and restaurants	number of companies with FDI	27	36	42	59	62
		number of local companies	628	683	743	793	817
		annual sales per employee in local companies, MDL	38527	41413	47955	64961	82875
I642	Telecommunications	number of companies with FDI	20	24	25	34	38
		number of local companies	167	244	302	323	253
		annual sales per employee in local companies, MDL	65660	72420	100591	111379	145546
F45	Construction	number of companies with FDI	33	35	51	63	60
		number of local companies	1158	1253	1405	1577	1694
		annual sales per employee in local companies, MDL	163832	192573	232124	392964	301574
G51	Wholesale trade and commission trade	number of companies with FDI	353	419	464	497	517
		number of local companies	3561	3657	3789	3991	4039
		annual sales per employee in local companies, MDL	750381	899377	886711	1073372	1225287
G50	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of fuel	number of companies with FDI	27	31	38	43	45
		number of local companies	668	756	822	914	927
		annual sales per employee in local companies, MDL	266965	269414	399437	387119	533400
A011	Production of crops	number of companies with FDI	20	22	30	29	30
		number of local companies	1118	1154	1160	1212	1214
		annual sales per employee in local companies, MDL	46489	59288	84887	85192	120832
D18	Manufacture of wearing apparel; dressing and dyeing of fur	number of companies with FDI	29	37	50	57	67
		number of local companies	135	153	171	192	195
		annual sales per employee in local companies, MDL	44436	45791	47635	47381	56601

Source: authors' calculations based on NBS data;

Vertical effects: "wearing apparel" cluster

The FDI had a major contribution on the development of the "manufacture of wearing apparel" sector. Thus, although the number of companies with foreign capital in the sector accounts for only 26% of the total number of companies, the sales revenue of these companies cover 64% of the total sales revenue in the sector. The textile and confection industry devel-

oped simultaneously with the increase registered in the “manufacture of wearing apparel” sector. However, the registered increase in the foreign companies of manufacture of clothes initially did not have a positive impact on the number of textile enterprises which provide raw materials for the manufacture of clothes sector. In 2005 their number even decreased by 8%, increasing again only in 2006. Besides, an important increase in the sales revenue of the foreign textile companies was registered in 2005-2006 and later the increase in the sales revenue of the local companies (Chart 20).

Chart 20. Annual increase in the sales revenue by activity sectors, %



Source: The authors' calculations on the basis of the data provided by the NBS.

Thus, initially the companies with foreign capital, specialized in the manufacture of wearing apparel and operating on the basis of outsourcing contracts mainly used to import the raw materials or were served by subsidiary textile companies established in the Republic of Moldova, which caused an earlier increase in their sales revenue. The strong increase in the sales revenue of the local textile companies in 2007 is indicative of the fact that some companies manufacturing wearing apparel started to cooperate with local providers. For instance, in the preparation and spinning of woollen-type fibres the foreign companies withdrew their capital and since 2007 this segment has been served only by local companies, where an over 27-fold increase in the sales revenue occurred. Also, in the weaving and manufacture of made-up textile articles, except apparel, a more significant increase in the sales revenue has been registered since 2007 in the local companies that directed their efforts both to exporting products and to serving new foreign companies manufacturing wearing apparel that entered the Moldovan market (Table 14). Although the export of these products increased, the growth rate was lower than the sales revenue growth rate, which was indicative of the increase in the internal demand (not only in the external one), including from foreign companies manufacturing wearing apparel, whose number and production increased faster than the local companies'.

Table 14. Annual increase in the sales revenue of the companies from the textile and confection, %

Description of the activity type	companies	2005	2006	2007	2008
Preparation and spinning of textile fibres	local	56.9	107.7	2745.2	83.2
	foreign	93.8	19.6		
Weaving	local	25.3	221.7	295.4	108.4
	foreign	1238.2	168.2	129.7	62.6
Finishing of textiles	local	32.9	183.9	197.8	82.0
	foreign		94.6	174.3	145.5
Manufacture of made-up textile articles, except apparel	local	111.0	95.6	106.3	131.3
	foreign	196.3	228.4	9.7	28.5

Source: The authors' calculations on the basis of the data provided by the NBS.

In these classes of the textile and confection both the number of local companies (by 14% in 5 years) and the sales revenue of already existing companies has increased. Also, until 2007 the increase of sales revenue per employee in the companies from the textile and confection sector had been higher in the foreign companies. Since 2007, the local companies have been showing higher increase rates, which is indicative of the increase in productivity of these companies with the increase in the demand for their products, including from the foreign companies in the "manufacture of wearing apparel" sector.

Chart 21. Annual increase in the sales revenue per employee, %



Source: the authors' calculations on the basis of the data provided by the NBS.

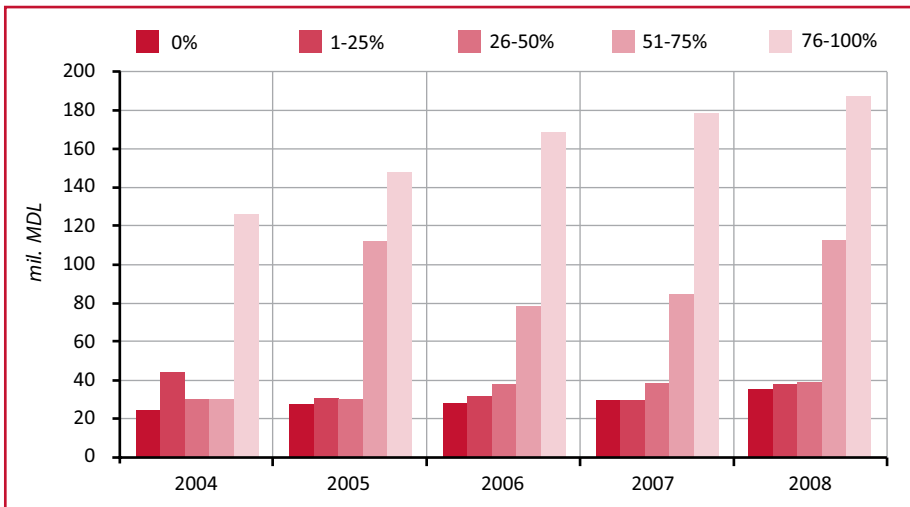
Thus, the manufacture of wearing apparel did not have an immediate impact on the confection industry for the import of raw materials in line with the contracts on external processing of the production, on the basis of which they operated. However, since 2007 foreign investors that contract local companies manufacturing textiles and confection to cover their raw materials needs entered the Moldovan market. The increase in the external demand for local providers caused an over five-fold increase in the sales revenue and over three-fold increase in the sales revenue per employee of the local companies in 2007. This impacted most on the preparation and spinning of fibres class, which accounts for over 70% of the sales revenue of the local textile companies.

Vertical effects: „beverage industry” cluster

It is normal to expect that the operation of companies specialised in beverage production would exert a direct impact on packaging producing enterprises. The active analysis of companies displaying activity in these sectors during recent years has revealed this kind of complementarity. Thus, the development/regress of the beverage production sector would immediately bring about a decrease of the demand to the raw material produced by the specialised glass packaging enterprises. The impact of foreign investments on the development of the two sectors is a significant one if taken into consideration the fact that during recent years the beverage production sector has benefited of a relatively big foreign capital inflow (during 2004-2008 the FDI doubled, going from 246.4 mln MDL to 509 mln MDL).

The double increase of the foreign capital value along with its share increase in companies from 18.3% in 2004, to 27.4% in 2008 explains the attractiveness of the beverage production industry for foreign investors. Chart 22 illustrates the fact that during last years this sector carried out its development mainly with the support of foreign investments. Thus, companies with foreign capital are of essentially bigger dimensions compared with the ones with domestic capital, fact allowing them, given the unity cost decrease, to develop more extensive and more competitive production lines from the price point of view. At the same time, the investment inflow growth in this sector has brought about the increase of companies with foreign capital during the 2004-2008 period of time.

Chart 22. Value of assets per company according to the foreign capital share in the company, mil. MDL



Source: authors' calculations based on the NBS data.

This evolution of foreign investments in the sector has had a corresponding influence on the glass packaging production sector. Chart 23 indicates the fact that extension of specialised foreign beverage companies has contributed in its turn to the extension of the glass producing enterprises. This is an example of additional positive effects generated by foreign investments, indicating that, apart from the effect on sectors they focus on, it also extends on other interconnected sectors.

Chart 23. Annual assets value growth per company in companies with foreign capital operating in beverage production and in companies specialised in glass packaging production, %

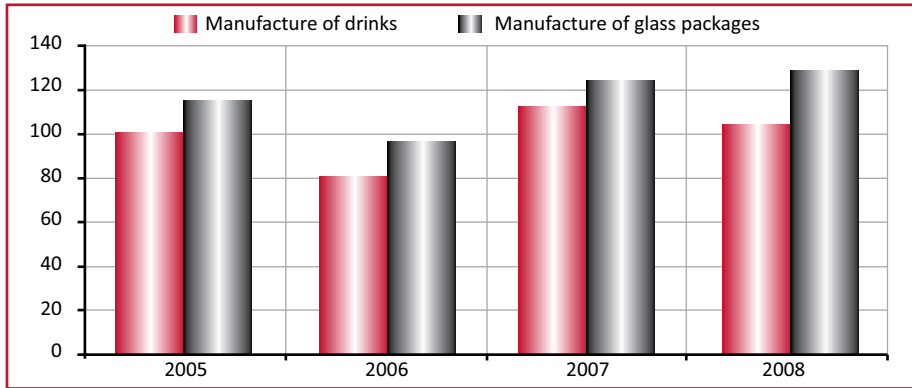


Source: authors' calculations based on the NBS data.

One can see that companies from both sectors practically follow a similar evolution. Diminution of the year 2006 indicator is explained by the trade embargo to Moldovan wine exports applied by the Russian Federation. In conditions when wine makes one fifth of the total beverage sales, one could, of course, expect that such an intervention would have negative effects on companies in both sectors, with some of them directly and the others – indirectly affected by the intervention. At the same time, during last years the growth rate of assets of beverage producing companies was considerably superior to the one characteristic for glass packaging companies (in 2008 the beverage producing companies have registered a 17.7% growth versus the 2.1% growth of glass packaging companies). The explanation of this difference lies with the bigger share of foreign capital in the beverage producing companies, they promoting a more intensive investment policy. Also, the efficiency of sales in these companies is higher, costs making a smaller share of the total sales value (74.6% versus 79.9% in 2008), fact offering more possibilities for the extension of companies.

Chart 24 illustrates the impact of the sales of beverage companies with foreign investments on the sales of the glass packaging sector. Thus, the same synergy between the two sectors is noticed, with an equally felt impact of the year 2006 embargo to wine export. During last years (2004-2008) the glass packaging companies have registered increased sales per employee (in 2008 they have been twice bigger than the ones registered in 2004, making 480,6 thousand MDL versus 239.1 thousand MDL). This growth was a consequence of the fact that beverage companies are accumulating a bigger volume of stocks, allowing the glass packaging companies to register bigger growth of revenues in case of sales per employee. In such a way, the beverage sector traditionally registers 3 to 5 times slower stock rotations compared with the glass manufacturing sector. At the same time, a considerable part of glass packages are being exported, thus generating additional revenues for these companies.

Chart 24. Annual growth of sales generated revenues per employee in beverage companies with foreign capital and in glass packaging companies, %



Source: authors' calculations based on the NBS data.

In conclusion, one may say that foreign direct investments have, to a great extent, determined the development of the beverage producing sector, contributing in an indirect way to the development of the glass packaging sector. The interconnection between the two sectors is a natural one, fact that has determined their synergetic evolution during last years (2004-2008). Thus, growth of the foreign investments inflow to beverage producing companies has had a positive influence on the development of the glass packaging companies, supporting the demand for these products. This case study is an eloquent example of the multidimensional effects generated by direct foreign investments on the development of companies. It is evident that the positive impact of these investments does not limit itself to only the sectors where they have been targeted, but also on other complementary sectors, generating positive externalities within the national economy. Consequently, in view of improving the business environment the decision-making factors should take into consideration this conclusion while setting priorities of sectors in need of a „local” approach (ex: streamlining the authorising processes for certain economic activities, elimination of certain bureaucratic constrains in a number of sectors).

2.7. FDI impact on the labour market

At present, the foreign-capital enterprises have a rather modest, but growing, contribution to the employment of population of the Republic of Moldova. It is evident that the structure of employment per types of enterprises, classified according their foreign capital share, depends on the general reporting basis. If taking into consideration the total number of employed population as employees of the formal real sector and the budgetary sector (about 729 thousand people in 2008 according our data, based, in their turn, on the Labour Force Survey developed by the NBS), then the foreign-capital enterprises stand for 9% of employees. However, from the perspective of the total number of „economically viable” enterprises (enterprises of the real sector submitting to the tax and statistical authorities financial reports showing no assets or zero sales), the share of foreign-capital enterprises is slightly bigger with respect to the total number of employees (about 14% of the total in 2008). This level of the population employment by the foreign-capital enterprises is smaller than the one registered in the Central and Eastern European countries, it making about 34% in the Check Republic, Romania and Poland and 45%⁹ in Hungary. However, starting with the 2004-2008 period of time, the foreign-capital enterprises

⁹ In conformity to the database of the Vienna Institute for International Economic Studies.

showed a continuously growing trend of the labour force employment (Table 15). Thus, we may expect a certain convergence of the Republic of Moldova with the Central and Eastern European countries with respect to the labour force employment by the foreign-capital enterprises.

Table 15. Distribution of employees per economically viable enterprises, classified according their foreign capital share, % of the total number of employees, %

foreign capital share in the assets of the company	2004	2005	2006	2007	2008
foreign capital = 0%	9067	89.45	88.20	87.09	85.69
0% < foreign capital <=25%	1.09	1.08	1.08	1.05	083
25% < foreign capital <=50%	1.12	1.23	1.71	1.88	2.14
50% < foreign capital <=75%	1.49	1.56	1.72	1.87	1.84
foreign capital > 75%	5.64	6.69	7.28	8.11	9.50
total number of employees	455772	461584	457931	456258	452717

Source: authors' calculations based on the NBS data.

It is interesting to notice that the enterprises with a predominant foreign capital (meaning with a share of the total statutory and supplementary capital exceeding 75%) show the most prominent presence on the labour market. This share of the total number of employed staff (9.5%) is disproportionably bigger compared with the share of the foreign-capital enterprises in the total number of enterprises (4.2%).

We also see that in 2005-2008 the number of staff in enterprises with no foreign capital (the category of economic viable enterprises covered by our analysis) decreased by about 25.3 thousand people (-6% compared to the 2004 level), and by 1.2 thousand people (-24%) in enterprises where the foreign capital represents a share under 25% of the total. In the same period of time, companies, in which the foreign capital makes more than 75% of their statutory capital, have employed about 17.3 thousand people (+67% compared to 2004). Together, enterprises in which the foreign capital exceeds 25% of the total have compensated a 88.5% reduction of staff in companies where the foreign capital makes less than 25% or is equal to zero. These evolutions, in a way, support the hypothesis in conformity to which, enterprises with more significant foreign investments are characterised by a more efficient employment and retention of staff compared to other cases.

One should notice here that at the intra-sector level a flow of the labour force from the local companies to the ones with foreign capital is observed in a number of sectors. For example, this is the case in the following important sectors: manufacturing of clothes items, fur preparation and dyeing, leather and leather goods production and shoe making industry, chemical industry, other nonferrous metal production, production of machines and electric apparatus. In spite of the fact that in a number of sectors the companies with foreign capital attract part of the labour force from the local competitors, their activity, however, generates the creation of new jobs. For example, this is a statement valid for the construction sector, fuel trade, retail trade, wholesale trade and commercial intermediation, hotels and restaurants, financial activities. In this context, our analysis has found a stereotype, according to which it is claimed that the companies with foreign capital from the information technologies sector attract, on a continuous basis, the labour force from the local enterprises, undermining, in such a way, the „local cluster“. In reality this phenomenon was seen only in 2008, when a small part of the labour force freed from the local soft companies found refuge in the companies with foreign capital. Later, the local companies operating in the information technologies sector, practically, were equally efficient as the foreign companies in creation and retention of employments (see more details in Annex 9).

The beneficial role of the companies with foreign capital in creating jobs is also demonstrated by the fact that the size of an enterprise – expressed in the number of employees – undergoes an evident enlargement in case of the increase of the foreign capital share. Table 16 clearly illustrates this connection and it also shows the significant statistical differences between the 5 categories of enterprises. More than that, it is observed that although in 2004-2008 the total number of foreign-capital enterprises has gone up, the number of staff employed in these enterprises decreases, fact suggesting that foreign companies, apart from competing with local enterprises, also compete among themselves in attracting the labour force.

Table 16. Average number of employees in economically viable enterprises, classified according the foreign capital share, persons

	2004	2005	2006	2007	2008
foreign capital = 0%	23.4	21.5	19.3	17.2	16.0
0% < foreign capital <=25%	32.8	300	29.7	27.1	204
25% < foreign capital <=50%	23.9	23.8	27.5	25.9	27.7
50% < foreign capital <=75%	43.9	38.8	37.7	36.1	34.9
foreign capital > 75%	45.2	45.7	39.1	36.5	38.8

Source: authors' calculations based on the NBS data.

What exactly attracts people to the foreign-capital enterprises? Apparently, there are a number of aspects that present interest to the employees, whereas, according to available data, the remuneration level, clearly, is the most important one. Table 17 convincingly demonstrates that salaries in foreign-capital enterprises are much bigger (2 times bigger in the average and even 3-4 times bigger in a number of sectors) compared to the ones paid in enterprises with no foreign capital. At the same time, with the increase of the foreign capital share the average salary shows a growing trend at the general level of the economy. There is, however, an awkward exception in case of enterprises with the foreign-capital share between 25% and 50% where salaries are constantly smaller compared with salaries in enterprises with foreign capital under 25%. The positive correlation between the salary value paid to employees and the foreign capital share remains valid and consistent, practically, for all economic sectors.

Table 17. Monthly average salary and sales/unit of employees in economically viable enterprises, classified according the foreign capital share, MDL

	2004	2005	2006	2007	2008
salary					
foreign capital = 0%	521.2	6108	727.4	876.7	1092.0
0% < foreign capital <=25%	9304	1038.0	1168.9	1422.1	1981.8
25% < foreign capital <=50%	891.1	884.6	1102.8	1323.4	1448.0
50% < foreign capital <=75%	989.3	1756.4	14506	17503	21606
foreign capital > 75%	1319.4	1344.8	1636.9	2135.5	25401
Sales per employee					
foreign capital = 0%	259271	297228	308016	364610	414294
0% < foreign capital <=25%	599118	691651	877764	597194	705654
25% < foreign capital <=50%	573407	556185	711267	858161	914033
50% < foreign capital <=75%	585714	762630	556718	669910	744271
foreign capital > 75%	560106	490764	557178	571442	618563

Source: authors' calculations based on the NBS data.

How can one explain these salary differences? It looks, that labour efficiency is a highly explicative factor, even if it does not offer an integral, direct and fully satisfying explanation of these salary differences (Table 17). In general, the personnel employed by foreign-capital enterprises show a higher labour efficiency compared with the one in local enterprises. However, contrary to the salary case, there is no proportional efficiency growth with the growth of the foreign capital share. To put it differently, companies with the biggest foreign capital share prefer to pay bigger salaries to their employees, even in cases when sales are smaller. It might be that also certain elements of a social corporative responsibility can explain this generosity. We think, however, that the statistic mean simply „disguises” the very big salaries paid to the management of the companies with foreign capital, which most often is composed of foreign persons.

Table 18. Number of employees in foreign-capital enterprises per sectors of activities, persons

CAEM Code	Name of the sector	2004	2005	2006	2007	2008
A011	Crop growing	680	769	879	1011	1160
A012	Animal breeding	8	11	62	32	106
A013	Crop growing associated with animal breeding				20	35
A014	Services provided to agriculture and to the animal breeding sector	132	103	58	32	48
D151	Production of meat and meat products	194	214	284	265	181
D152	Processing and canning of fish and fish products	55	201	125	120	203
D153	Processing and canning of fruit and vegetables	724	1228	1326	1091	871
D154	Production of vegetable oil and animal fat	12	71	98	48	60
D155	Production of dairy products	489	498	437	487	411
D156	Manufacture of milled products, starch and starch products	307	217	248	55	40
D158	Manufacture of other food products	2232	2198	1930	1693	1256
D159	Beverage manufacture	6131	6603	6048	5829	6119
D16	Manufacture of tobacco products	66	41	41	42	102
D17	Manufacture of textile products	1620	894	1166	1287	925
D18	Manufacture of clothes items; preparation and dyeing of furs	6434	9509	11066	11888	12390
D19	Leather production, leather goods and shoe manufacturing	428	422	804	1031	1371
D20	Wood processing and wood products manufacturing	352	414	389	263	222
D21	Paper and cardboard manufacturing	913	959	860	841	739
D22	Printing houses, polygraphic products and reproduction of information materials	215	210	160	166	156
D23	Manufacture of coke, refined petroleum products			108	82	18
D24	Chemical industry	462	511	561	503	569

CAEM Code	Name of the sector	2004	2005	2006	2007	2008
D25	Rubber and plastics industries	432	534	678	824	1006
D26	Production of other products from nonferrous minerals	902	1094	1614	1590	1569
D28	Manufacturing finished metal products, machines and tools	162	268	274	305	397
D29	Manufacturing of machines and equipment	1341	1123	594	536	559
D31	Manufacturing machines and electrical devices	82	71	159	516	1554
D35	Production of other transportation vehicles	3	3	2	13	7
D36	Furniture manufacturing and other industrial activities	121	429	308	715	400
D37	Recycling waste and other recyclable materials	73	43	22	3	1
E401	Production and distribution of electric energy	1776	1561	1656	1423	1307
E402	Production and distribution of gas fuel	109	108	113	112	233
F45	Constructions	586	509	1174	1463	1325
G50	Sale and repair of automobile and motorcycles; retail sale	557	473	670	2547	2769
G51	Wholesale trade and intermediation	6538	7992	9232	8867	10023
G52	Retail trade; repair of household utensils and personal goods	2043	2428	3182	3825	5039
H55	Hotels and restaurants	876	916	1188	1447	1700
I60	Terrestrial transportation	387	563	286	312	311
I62	Air transportation	319	327	408	364	308
I63	Complementary and auxiliary transportation activities; tourism agencies	714	646	637	782	792
I642	Telecommunications	747	874	940	1284	1366
J65	Financial activities	162	204	319	439	432
K70	Real estate transactions	789	757	1099	959	1667
K71	Rent of cars and tools, of personal goods and objects to use	43	50	55	57	37
K72	Hardware and related activities	372	472	666	999	1385
K74	Other activities and services provided to enterprises	1307	1338	1108	1329	2012
O90	Disposal of waste and sewage water; water cleaning and water treatment, etc.				33	15
O92	Recreation activities, culture and sports	608	790	924	1311	1549
O93	Provision of Individual services	41	56	67	75	60
	Total	42544	48702	54025	58916	64805

Source: calculations of Expert Group based on the NBS and ME data;

From the table above one can see that foreign-capital enterprises prefer residing in Chisinau, or in the vicinity, and employing labour force from this city. In their capacity of employers they are present in most part of activities and in principle the companies with foreign capital practice no occupational concentration per sectors of activity (Table 18). Nevertheless, it seems that foreign-capital enterprises arriving to the Republic of Moldova are more attracted by sectors, in which technological processes use intensive labour force of low or medium level of qualification (manufacturing of clothes items, shoes, fur preparation and dyeing, trade, hotels and restaurants) and are less attracted by sectors, in which technological processes request high qualification labour force or are rather capital intensive than labour intensive (engineering industry, manufacturing of electrical equipment).

One should mention, however, that foreign investors also prefer to engage into intensive activities requiring medium advanced technologies (beverage manufacture, production of construction materials), or highly advanced technologies (hardware and related activities, production of electric machines and tools). In a number of sectors, such as generation of electricity, manufacturing of paper and cardboard, which are dominated by one or two companies with foreign capital, one may notice that these companies are engaged into an industry restructuring process, action associated by sacking of personnel. Table 18 highlights a number of sectors, which are not concentrated within the focus of large stakeholders and which gradually become less attractive for foreign companies. They employ less and less personnel, or abandon the sector altogether, these being the textiles, manufacturing of machines and equipment, manufacturing of dairy products, manufacturing of other food products, wood processing and manufacturing of wood items, meat products, provision of services to agriculture, manufacturing of starch and flours.

CHAPTER 3.

CONCLUSIONS AND POLICY RECOMMENDATIONS

This section contains the survey major conclusions, drawn from the perspective of their implications in the state policies, and the policy recommendations deriving from these conclusions.

3.1. Major conclusions of the study

- ♦ Countries in transition, in their majority, have registered a spectacular evolution as far as the attraction of direct foreign investments (FDI) is concerned. Their share as net-recipients in the global flow of FDI went up from 0.03% in 1990 to 7% in 2008. Different countries have progressed in different ways, very much depending on each country's economic potential, availability of natural resources and their institutional characteristics.
- ♦ In the absence of an attractive economic potential and natural resources and also lacking an attractive investment environment, the Republic of Moldova turned out to be one of the „weakest” country as far as attraction of foreign direct investments in its economy is concerned. While in 2008 the FDI stocks per capita in countries in transition used to be 2363 USD, and approximately 866 USD in the Eastern European countries and the Caucasus, in the Republic of Moldova this indicator was equal to only 720 USD, magnitude that could be reached as a result of a significant investment inflows registered in 2007-2008 (about 10% of the GDP).
- ♦ Introduction of the zero rate tax to reinvested revenue has had a positive influence on the decision regarding the income investment. This was noticed in the first quarter of 2008, immediately after the introduction of zero rate tax when a considerable increase of reinvested revenues in companies with foreign capital occurred. However, our analysis indicates that the evolution of the global financial crisis had a crucial influence on the investors' plans. On the other hand, in 2008 there was a constant increase of investments into statutory capital, telling us that one should not blame the financial crisis in all situations.
- ♦ In the Republic of Moldova the financial crisis had a dramatic impact on foreign investments, the FDI inflows decreasing in 2009 more than 8 times, which is one of the biggest decreases among the Central and Eastern European countries. Although dramatically sized down in 2009, the investments into statutory capital remained, nevertheless, positive (155 mln USD), while the „reinvested income” and „other capital” investments were negative (-25 and, respectively, -44 mln USD), telling us that significant net capital withdrawal from the country took place.
- ♦ Two thirds of the foreign capital present in the Republic of Moldova is invested in joint venture companies, while the rest belongs to companies in foreign ownership. From the point of view of the total capital value and also from the numerical point of view the companies with foreign capital are concentrated in the category of companies with a large share of foreign capital (75-100%), fact indicating that foreign investors prefer to control the management of companies as much as possible, or even integrally.

- ◆ During 2005-2008 the foreign investments have increased in their absolute volume and also have diversified. While at the end of 2005 the FDI were in their majority concentrated in the „processing industry“, „electricity and heating energy, gas and water supply“ as well as in „wholesale and retail trade; car repair, repair of motorcycles, of household and personal goods“, then by the end of 2008 there was an increase of the share of „financial activities“ and of „transactions in securities, rental activities and provision of services to enterprises“. One may notice, however, that these investments are made into other sectors than the ones producing internationally commercialised goods or services. Indeed, in a situation when only 16.8% of the total stocks of FDI are concentrated in the processing industry, it becomes obvious that for the time being the FDI has had a modest role in the development of the international competitiveness of the country.
- ◆ From the point of view of the geographical origin of investments the FDI structure has undergone essential changes in 2004-2008. However, it is important to specify here that in a situation when Tax havens or countries with tolerant tax regimes constitute the real origin of certain investments, the real origin of investments differ from the one indicated in the reports. For example, according to reports, in 2008 more than 31% of the total investment stocks originate from Netherlands and Cyprus, the latter being on the first, and respectively, on the second place in the FDI top from the point of view of the declared origin of capital. Both countries are, however, well known to give shelter to the capital of totally different origins (including Russian, Romanian, Ukrainian and Moldovan). During last years the Italian investments showed a considerable progress, achieving by year 2008 the third place in the top with a 10 fold increase of investment stocks. At the same time, it is important to mention the decrease of the absolute volume of investment stocks from Switzerland and Spain and the appearance of Ukraine and Israel as important investment countries of origin in the Republic of Moldova.
- ◆ Another peculiarity of FDI in the Republic of Moldova is their concentration from the territorial point of view, which has become stronger with time. In 2008 the Chisinau municipality was standing for 79.8% of the total FDI stocks. The only advantages the regions of the Republic of Moldova may offer to foreign investors are the cheaper labour force (relevant for textiles), proximity to the raw materials (construction materials) and existence of a specific market (provision of services to farmers).
- ◆ One may say that, on the long term, FDI had a major role in ensuring the economic growth in the Republic of Moldova, if taking into consideration that the share of foreign and joint venture companies in the GDP went up from 1% in 1995 to about 19% in 2008. Companies with foreign capital have, practically, initiated many sectors from zero level (the mobile telecommunications, for example) or have saved certain companies from a collapse (production and distribution of electricity). In 2004-2008 the companies with foreign capital have had bigger sales compared with the domestic ones. Sectors with the biggest income growth generated by sales in 2004-2008 are the ones characterised by relatively high, or very high, share of FDI.
- ◆ Analysis shows that foreign companies are better positioned on the domestic market, have more efficient marketing policies and are more competitive in the average. This is true with respect to the economy in general and with respect to most economic sectors. Still, there are certain sectors, in which the domestic companies remain the most competitive ones.
- ◆ Companies with foreign capital are larger than the local ones and promote a more active investment policy in comparison to companies with domestic capital. Large scale produc-

tion, better economic performances and bigger access to external financial sources has made possible for companies with foreign capital to register essentially bigger inflows of tangible and intangible assets during last years. At the same time, the fact was demonstrated, with some exceptions, that companies oriented to the satisfaction of the internal demand promote a more active investment policy compared with the ones oriented mainly to exports.

- ♦ Based on the available data it was not possible to assess the direct and univocal role of the companies with foreign capital in the promotion of Moldovan exports. The number of companies with foreign capital in a certain year, or the increase of the number of companies in a certain period of time does not explain sufficiently well the growth of exports in the Moldovan economy in general. At the same time, there are export oriented sectors that have been integrally developed by foreign-capital enterprises.
- ♦ Analysis of FDI horizontal effects (effects on the local competitors in the sector) and vertical effects (on the suppliers) indicates that the positive effects predominate over the negative ones. Although there are sectors in which it seems that local companies have been affected by the arrival of the companies with foreign capital (and which revived after the withdrawal of the latter), in most sectors no negative effects on the local competitors is observed. At the level of disaggregation that we worked at, one can observe that in most sectors the growth of the number of companies with foreign capital was accompanied by the growth of the number of local companies and also by an increase of sales in the local companies. Consequently, it looks like that all sectors of the Moldovan economy are far from being saturated and that the number of actors within them may continue to grow for a little more time. It was not possible to carry out an analysis of FDI vertical effects at the level of the entire economy. However, the two conducted case studies (cluster of clothes items and cluster of beverages) indicated that the arrival of FDI into our economy has had a favourable influence, although not necessarily immediate, on the economic situation of local suppliers.
- ♦ For the time being, the companies with foreign capital have a rather modest, but growing, contribution to the employment of population of the Republic of Moldova. In conformity to our estimations the share of the companies with foreign capital in the total number of employees (per categories of the „economic viable enterprises”) has gone up from 9.3% in 2004 to about 14.3% in 2008. It is essential to mention here that enterprises, in which the foreign capital predominates (meaning the ones in case of which its share exceeds 75% of the total statutory and supplementary capital), have the most prominent presence on the labour market. In general, the predominant effect is the net creation of new jobs by the foreign-capital enterprises, but also there are sectors in which a reflux of labour force from local companies to the ones with foreign capital is observed. By all means, the salaries are the main point of attraction for the labour force, which are significantly higher in companies with foreign capital. At the same time, it is observed that at the overall level of economy the average salary shows the trend to grow along with the growth of the share of foreign capital in the company’s capital.

3.2. Policy recommendations for FDI attraction

Given the main conclusion of this analysis, saying that the FDI positive effects are more significant than their negative effects, it becomes clear that the Government needs to ensure further enhancement of FDI size in the Moldovan economy. Below, a number of proposals are made meant at ensuring the increase of FDI inflow into the economy, but also the capacities of the Moldovan economy to efficiently absorb these investments:

- ♦ In implementing the FDI attraction policy, one should take into account the fact that given its limited economic potential and lack of natural resources the Republic of Moldova is, objectively, one of the less attractive countries of location for companies with foreign capital. Part of the present advantages of the country may disappear with time. For example the labour force, which at the moment is still cheap and relatively qualified, might become more expensive with time but not necessarily more qualified. That is why the Republic of Moldova should create a very encouraging institutional framework for investments and business and should ensure a good development of the most valuable resource it (still) has – the human capital.
- ♦ Although beyond the scope of our research, the reform of the educational sector constitutes a key premise in ensuring, in the long term, the human capital development in the Republic of Moldova and the enhancement of absorption capacities of foreign investments. We place this subject on the first place because other surveys have identified that lack of a corresponding educational offer is the main reason impeding the development and extension of private companies. Many investment ideas do not materialised effectively also for the reason that the Republic of Moldova suffers an acute deficit of medium or highly qualified labour force. At the same time, institutions carrying out the vocational education would have to additionally teach the students a culture of that corresponding labour.
- ♦ Taking into account the positive horizontal and vertical effects mentioned above in connection with the FDI inflow, a further attraction of FDI would permit raising the labour efficiency and general efficiency of factors at the level of the entire economy, and would have fundamental and positive effects for the long term development of the country. However, for this to happen it is necessary to encourage placement of foreign investments into sectors qualifying as international commercial sectors, so that the efficiency earnings directly translate into the international competitiveness of the country.
- ♦ Agriculture – an extremely important sector from both social and economic points of view - hasn't showed any development during the last two decades for the reason of an acute absence of investments. The fact that resident companies with foreign capital have no right to purchase agricultural land acted as one of the factors that have created this deficit. Nevertheless, there existed several legal „doors“ that allowed a few companies with foreign capital to buy land plots. We think it is necessary to annul the interdiction for the companies with foreign capital to procure agricultural land. Taking into consideration the political implications of this decision, transition to the total liberalisation might be done in a gradual and conditioned way (for example, a maximum limit might be imposed for areas that can be purchased, existence and efficient implementation of a clear investment plan, creation of jobs, etc.).
- ♦ The Government will have to continue and intensify its efforts aimed at debureaucratization of the regulatory framework of the business activity. In particular, these efforts will have to be focused on debureaucratization of business activities in the economic sectors with a positive impact on the development of other sectors of the national economy, these being: 1) production of beverages with an impact on a bigger cluster, including the glass industry, the paper and cardboard industry, 2) the food industry with an impact on the vegetable crops and animal breeding, 3) the construction sector with an impact on the excavation industry, the industry of non ferrous products (construction materials). Additionally, efforts need to be made to streamline financial reporting of enterprises, namely, the number of submitted reports and the number of agencies to submit these reports to. This could be achieved also through a provision of governmental electronic services at a larger scale.

- ◆ Up to the present, less than 30% of FDI that have come into Moldovan economy have settled in other regions than the Chisinau municipality. These investments are mainly attracted by the cheap labour force, proximity of the raw material and the existence of a demand for agricultural services. It is evident that on a long term these factors have no chances to remain attractive. FDI would come to regions only if companies, in which investments are placed, are able to provide services to larger segments of the regional, national or international markets. Physical access to these markets is impeded by very poor connections and arterial roads, which substantially increase the production costs. Sustainable financial efforts and political will are necessary to ensure the development of transportation infrastructure in regions, so that the latter, ultimately, present interest to the FDI. Most probably, in the short term, the situation will predominate when companies with FDI will continue to be attracted by regions with low costs of labour force. The government must not oppose this process, because this is one of the few advantages the regions may benefit of. At the same time, it is very important that, on the long term, the government encourages FDI companies, especially the ones operating in the capital-intensive sectors, to target localities in the regional levels. To do that, companies will need better trained human resources, willing to work in the regions. Migration of FDI in the regions from the labour intensive sectors to the capital-intensive ones will considerably increase the fiscal basis at the local and regional levels and will facilitate a more sustainable development of the economy at the community level.
- ◆ Additionally to the lack of roads, the absence of infrastructure, or the high costs required for the instalment of the communal infrastructure necessary for the economic activity (medium or high capacity gas networks, secure connections to the electricity networks, drinking and industrial water supply, domestic wastewater and industrial wastewater sewage systems, waste processing facilities) constitute another constraint impeding the arrival of FDI into regions. Together with the poor quality of roads and institutional deficiencies, these shortages impeded the arrival of a bigger inflow of the Greenfield type investments. The international experience tells us that for countries with a development level similar to the one of the Republic of Moldova the only chance to overcome this deficiency would be setting up industrial parks – public or private – which might offer to potential investors the necessary industrial platforms to start investment projects with minimum costs.
- ◆ Regeneration of industrial platforms inherited from soviet times or created in the process of industrial restructuring and privatisation would be another option (non-contradictory with the new industrial parks), provided that it offers the necessary conditions for quick launch of the production activity by avoiding very high costs.
- ◆ The statistical data used in this survey were not sufficient to also measure how large and intensive is the technology transfer achieved after the arrival of companies with foreign capital. Certain indicators confirm the existence of such a transfer, among them being the fact that the companies with foreign capital are much better capitalized compared to the domestic ones and the fact that they invest more into procurement of tangible and intangible assets. Also horizontal and vertical positive effects are observed to take place between companies with foreign capital and domestic companies expressed in the fact that the latter are forced by the presence of foreign competitors to become more efficient, or even learn and apply foreign technologies. However, one should mention that an essential share of FDI arrive here with the only goal to benefit of cheap labour force offered by the Republic of Moldova. On the long term this advantage will disappear, and it might be that also the foreign capital benefiting of this factor will withdraw. It is important, meanwhile, to ensure that the effective technology transfer to the domestic companies is done, including by means of more encouraging tax policies.

- ◆ Absence or deficit of territories for construction sites constitutes an essential constraint that impedes the arrival of a bigger inflow of FDI, a situation observed especially in regions with a very big share of arable lands and with an increasing, with every year, of the share of unfarmed land. The critical need exists to streamline the procedure of withdrawal of land plots from the category of arable land, especially when these territories are earmarked to be allocated for investments into productive activities expected to also have a vertical positive effect on agriculture. Of course, facilitation of this process is not recommended in situations when the investors intend to carry out processing of agricultural raw material with the risk to cause degradation of arable lands. A relevant example of such a situation would be the bioethanol extraction from rape and other crops, which can bring about a rapid exhaustion of the land productive and regenerative capacity.
- ◆ It is necessary to exclude the non-competitive arrangements existing at present on certain segments of the market, which impede penetration of new investments on these, or related, markets. A good example in this sense is the market of the air passenger transport services. Liberalization of this market and arrival of a number of low-cost companies will bring about an essential reduction of the travel costs (including for foreign investors and experts).
- ◆ Liberalization of access to the telecommunication infrastructure and the supporting facilities (pillars, cables, last mile), which is controlled by the state or public operators (Moldtelecom, Rail Way of Moldova), would open an extremely attractive niche for further development of the telecommunication sector, including the broad-band Internet, in which case a significant contribution might come from new companies with foreign capital, or the already existent ones in the Republic of Moldova.
- ◆ The Public Private Partnership is a contractual arrangement, the potential of which is not utilised at all, including for the attraction of a bigger FDI inflow. Utilization of this opportunity requires a clarification of the tax framework and an official establishment of legal responsibilities of all stakeholders involved in projects implemented within the Public Private Partnership. Absence, for the time being, of any success story in this area scares the potential investors. It would be necessary that the Government promotes at least several small size projects with chances of success, so that they act as attraction points for other bigger projects.
- ◆ Privatization needs to go on in the Moldovan economy! For a poor country like the Republic of Moldova, the public sector is still extremely large and inefficient. Non-restructured public companies, protected from the real competition through all kind of instruments, represent a big burden for the economy and absorb the human and financial resources that might be used in a more efficient way. Once the effects of the global financial crisis attenuate, a favourable period will come to restart the privatization programme, which might bring more FDI to the economy.
- ◆ Although the analysis of statistical and reporting framework was beyond the scope of this survey, it is clear, however, that this can be further improved. First, it is necessary that the National Bank of Moldova (NBM) and the National Bureau of Statistics (NBS) agree to use a single standard in publishing the statistical data. Second, it would be necessary to identify and eliminate the causes of enormous discrepancies between the FDI related data published by NBM and the ones published by NBS. In this context, it might be necessary that the NBM have full access to the data belonging to the NBS.

ANNEXES

Annex 1.

Sales revenues per employee, classified according to the FDI share in the company statutory capital, MDL, 2008

CAEM Code	Description	0%	1-25%	26-50%	51-75%	76-100%
A011	Crop growing	120832	67402	158654	139319	234045
A012	Animal breeding	207191	1618554		71303	324861
A013	Crop growing associated with animal breeding	85514				65035
A014	Services provided to agriculture and to the animal breeding sector (with the exception of services to sanitary-veterinary sector)	86246		3708523		357655
D151	Production, processing and canning of meat and meat products	373674	275543	278209		234954
D152	Processing and canning of fish and fish products	640856	1236178			153405
D153	Processing and canning of fruit and vegetables	264204	1749437	93019	242800	123508
D154	Production of vegetable oils and animal fats	163820	34560			72822
D155	Production of dairy products	246342		302767	782359	308694
D156	Manufacture of milled products, starch and starch products	159271	172511		123930	468415
D158	Manufacture of other food products	127501	99968	197120	293322	1903297
D159	Beverage manufacture	216735	262006	212299	166984	469460
D16	Manufacture of tobacco products	301208	441226			217242
D17	Manufacture of textile products	110859	98787	41326	125750	64424
D18	Manufacture of clothes items; preparation and dyeing of furs	56601	40294	49012	86882	89845
D19	Leather production, leather goods and shoe manufacturing	72865		46991	5625	71242
D20	Wood processing and wood products manufacturing	150068	52940	47882	119716	71297
D21	Paper and cardboard manufacturing	448698			74151	137196
D22	Publishing houses, polygraphic products and reproduction of information materials	166266	235716	243369	502403	530609
D23	Manufacture of coke, refined petroleum products	725014			143372	2102213
D24	Chemical industry	307735	247318	502179	287600	471822
D25	Rubber and plastics industries	241148	411689	214229	202541	266739

CAEM Code	Description	0%	1-25%	26-50%	51-75%	76-100%
D26	Production of other products from nonferrous minerals	256844	3056415	310227	864832	989599
D28	Manufacturing finished metal products, machines and tools	260095	713942	300914	398720	143422
D29	Manufacturing of machines and equipment	175957	160470	58391	365396	266974
D31	Manufacturing machines and electrical devices	123013		131740		111066
D35	Production of other transportation vehicles	142957		27196	43100	655699
D36	Furniture manufacturing and other industrial activities	114875	56515	79268		370060
D37	Recycling waste and other recyclable materials	451212			1700000	
F45	Constructions	301574	530140	307372	442163	351403
G50	Sale, maintenance and repair of automobile and motorcycles; fuel retail trade for transportation vehicles with internal combustion engines	533400	3610204	1085739	933724	1045977
G51	Wholesale trade and intermediation, exclusively trade of automobiles and motorcycles	1225287	979075	868298	1908963	993640
G52	Retail trade; repair of household utensils and personal goods	283485	420380	547569	297219	628894
H55	Hotels and restaurants	82875	137855	118371	106258	127028
I60	Terrestrial transportation	287875	300270	187834	142221	2504973
I62	Air transportation	398872	381489	4491033		320987
I63	Complementary and auxiliary transportation activities; tourism agencies	580086	2116054	3755222	2016365	894160
I642	Telecommunications	145546	343196	376073	706388	614814
J65	Financial activities	894191	502435	6710106	258858	1201904
K70	Real estate transactions	125007	181720	466225	241002	349555
K71	Rents of cars, operator-free equipment and of personal goods and objects	89281	18356		2527499	390154
K72	Hardware and related activities	152421	207122	276278	111832	182219
K74	Other activities and services provided to enterprises	177684	294754	109652	321181	374607
O90	Disposal of waste and sewage water; water cleaning and water treatment, other similar activities	53791		6954		
O92	Recreation activities	128109	283722	95184	178052	721041
O93	Provision of Individual services	33942	151809	101528		32982

Source: calculations of Expert Group based on the NBS data.

Annex 2.

Average value of assets per company, groups of economic activities and groups of enterprises according to the share of foreign capital in the total statutory and supplementary capital, thousand MDL, 2008

CAEM Code	Description	0%	1-25%	26-50%	51-75%	76-100%
A011	Crop growing	5098.0	16944.2	6922.2	22293.7	8481.1
A012	Animal breeding	8495.8	6117.1		215.9	13704.3
A013	Crop growing associated with animal breeding	8490.7				10710.3
A014	Services provided to agriculture and to the animal breeding sector (with the exception of services to sanitary-veterinary sector)	3725.0		2832.1		7167.3
D151	Production, processing and canning of meat and meat products	10729.1	2498.5	7109.8		7238.6
D152	Processing and canning of fish and fish products	6331.0	41512.2			25588.0
D153	Processing and canning of fruit and vegetables	17824.5	7043.0	30210.0	3325.8	9248.0
D154	Production of vegetable oils and animal fats	13108.9	1503.0			22783.4
D155	Production of dairy products	51831.4		7603.4	1392.6	66389.8
D156	Manufacture of mill products, starch and starch products	3700.4	23645.6		2618.1	2692.7
D158	Manufacture of other food products	6027.6	7092.1	263.6	148641.8	81913.7
D159	Beverage manufacture	35488.4	37985.6	38959.7	112658.7	187422.6
D16	Manufacture of tobacco products	42344.7	20074.5			8995.2
D17	Manufacture of textile products	10341.8	1350.4	588.6	13245.8	1808.6
D18	Manufacture of clothes items; preparation and dyeing of furs	2271.0	1988.4	3037.6	3570.0	9899.9
D19	Leather production, leather goods and shoe manufacturing	4887.7		5815.7	81.7	13059.3
D20	Wood processing and wood products manufacturing	1259.7	723.6	1032.2	2601.9	12982.8
D21	Paper and cardboard manufacturing	1759.2	3495.2	1873.0	2154.1	15956.9
D22	Publishing houses, polygraphic products and reproduction of information materials	64830.0			71410.7	67540.0
D23	Manufacture of coke, refined petroleum products	64830.0			71410.7	67540.0
D24	Chemical industry	10248.2	56463.3	6528.5	17681.3	12316.8
D25	Rubber and plastics industries	3871.2	105357.7	19998.0	4287.4	12573.8

CAEM Code	Description	0%	1-25%	26-50%	51-75%	76-100%
D26	Production of other products from nonferrous minerals	7682.2	33915.8	141594.0	8931.2	337867.0
D28	Manufacturing finished metal products, machines and tools	3262.2	5885.3	15046.1	1976.1	5531.9
D29	Manufacturing of machines and equipment	4981.5	15075.0	158.9	2521.4	22027.2
D31	Manufacturing machines and electrical devices	3704.1		762.9		17745.3
D35	Production of other transportation vehicles	1819.5		62.4	38.8	3141.1
D36	Furniture manufacturing and other industrial activities	2970.2	1070.1	376.7		5020.0
D37	Recycling waste and other recyclable materials	20519.2			15494.5	
E401	Production and distribution of electricity	313120.7			14026.8	2708777.5
E402	Production and distribution of gaseous fuels	246666.1		8930812.5	334849.5	10504.2
F45	Constructions	6111.0	15379.5	12038.0	23581.1	16254.3
G50	Sale, maintenance and repair of automobile and motorcycles; retail trade of fuel for transportation vehicles with internal combustion engines	3824.0	5712.9	22972.4	8803.0	90972.6
G51	Wholesale trade and intermediation, exclusively trade of automobiles and motorcycles	4921.9	8884.2	20217.1	12653.6	16875.7
G52	Retail trade; repair of household utensils and personal goods	1958.0	8047.6	6636.8	27142.9	13676.8
H55	Hotels and restaurants	1958.0	24429.2	1566.4	5627.1	12249.2
I60	Terrestrial transportation	6128.4	5089.9	1029.7	857.1	10665.5
I62	Air transportation	60644.5	30432.5	45512.9		1185.0
I63	Complementary and auxiliary transportation activities; tourism agencies	4120.1	7839.4	4356.6	7631.0	5146.2
I642	Telecommunications	18262.4	2333.1	3227.3	372057.1	62432.0
J65	Financial activities	36207.8	436302.3	96597.4	507.5	122700.7
K70	Real estate transactions	4804.3	32908.2	32258.1	43096.5	33799.5
K71	Rent of cars, of operator free equipment and of personal goods and objects	2732.8	242.3		13270.5	3346.3
K72	Hardware and related activities	1924.8	56.5	874.2	3184.0	2002.7
K74	Other activities and services provided to enterprises	4106.2	4417.5	755.6	1473.6	16898.7

CAEM Code	Description	0%	1-25%	26-50%	51-75%	76-100%
O90	Disposal of waste and sewage water; water cleaning and water treatment, other similar activities	29120.7		8584.3		
O92	Recreation activities, sports and cultural activities	5464.4	8918.3	2989.0	15692.4	13696.0
O93	Provision of Individual services	496.6	1975.6	1150.7		622.4

Source: calculations of Expert Group based on the NBS data;

Annex 3.
Average value of assets per employee, groups of economic activities and groups of enterprises
according to the share of foreign capital in the total statutory and supplementary capital,
thousand MDL, 2008

CAEM Code	Description	0%	1-25%	26-50%	51-75%	76-100%
A011	Crop growing	109.23	376.54	427.29	263.83	262.05
A012	Animal breeding	295.53	1359.37		71.97	728.95
A013	Crop growing associated with animal breeding	113.55				612.02
A014	Services provided to agriculture and to the animal breeding sector (with the exception of services to sanitary-veterinary sector)	212.82		1416.05		623.24
D151	Production, processing and canning of meat and meat products	285.25	208.21	263.32		254.88
D152	Processing and canning of fish and fish products	298.63	1383.74			357.87
D153	Processing and canning of fruit and vegetables	390.38	2347.66	326.59	56.05	91.56
D154	Production of vegetable oils and animal fats	607.28	214.71			1289.63
D155	Production of dairy products	607.28	214.71			1289.63
D156	Manufacture of milled products, starch and starch products	282.38	5911.39		137.79	475.17
D158	Manufacture of other food products	133.91	202.63	105.46	1088.15	1339.71
D159	Beverage manufacture	533.94	467.31	350.99	720.91	1170.96
D16	Manufacture of tobacco products	383.88	669.15			249.87
D17	Manufacture of textile products	323.41	81.03	51.19	99.59	38.55
D18	Manufacture of clothes items; preparation and dyeing of furs	58.92	110.47	11.12	16.52	57.91
D19	Leather production, leather goods and shoe manufacturing	76.05		38.77	40.86	134.38
D20	Wood processing and wood products manufacturing	175.07	217.09	93.84	216.82	276.23
D21	Paper and cardboard manufacturing	430.85			529.95	224.92
D22	Publishing houses, polygraphic products and reproduction of information materials	192.77	332.88	234.13	239.35	1196.77
D23	Manufacture of coke, refined petroleum products	913.10			10201.53	6140.00
D24	Chemical industry	366.01	497.47	438.48	376.20	648.25
D25	Rubber and plastics industries	326.65	540.30	510.15	223.69	427.51
D26	Production of other products from nonferrous minerals	375.24	2826.31	1273.33	470.06	2532.19

CAEM Code	Description	0%	1-25%	26-50%	51-75%	76-100%
D28	Manufacturing finished metal products, machines and tools	266.71	321.02	578.70	263.48	370.69
D29	Manufacturing of machines and equipment	157.67	628.12	35.30	124.51	313.93
D31	Manufacturing machines and electrical devices	169.94		76.29		45.97
D35	Production of other transportation vehicles	49.51		20.79	38.78	1047.02
D36	Furniture manufacturing and other industrial activities	196.75	107.01	98.26		112.49
D37	Recycling waste and other recyclable materials	787.42			15494.54	
E401	Production and distribution of electricity	1268.51			2003.83	2094.96
E402	Production and distribution of gaseous fuels	683.44		84252.95	2790.41	1500.61
F45	Constructions	307.99	718.67	560.91	924.75	751.90
G50	Sale, maintenance and repair of automobile and motorcycles; retail trade of fuel for transportation vehicles with internal combustion engines	446.06	1269.53	825.36	690.43	749.56
G51	Wholesale trade and intermediation, exclusively trade of automobiles and motorcycles	625.84	737.55	900.49	930.65	819.61
G52	Retail trade; repair of household utensils and personal goods	251.71	791.56	434.55	1756.64	363.16
H55	Hotels and restaurants	149.92	572.56	170.60	154.87	417.59
I60	Terrestrial transportation	180.56	742.27	205.95	233.75	688.10
I62	Air transportation	880.87	272.94	1213.68		355.49
I63	Complementary and auxiliary transportation activities; tourism agencies	351.29	368.91	533.46	401.63	300.00
I642	Telecommunications	561.82	184.19	597.64	4537.28	1975.15
J65	Financial activities	6537.53	4452.06	19319.49	84.59	5707.01
K70	Real estate transactions	525.65	1759.79	7081.04	4713.68	2236.91
K71	Rent of cars, of operator free equipment and of personal goods and objects	500.21	121.15		1658.81	1338.50
K72	Hardware and related activities	115.20	35.28	169.62	262.21	99.72
K74	Other activities and services provided to enterprises	405.83	592.29	131.59	297.20	1210.19
O90	Disposal of waste and sewage water; water cleaning and water treatment, other similar activities	696.34		572.29		
O92	Recreation, sports and cultural activities	237.88	137.20	61.10	128.63	340.44
O93	Provision of Individual services	75.13	82.32	131.50		622.40

Source: calculations of Expert Group based on the NBS data;

Annex 4.

Share of costs as part of the sales of companies per groups of economic activities and groups of enterprises according the share of foreign capital in the total statutory and supplementary capital, %

CAEM Code	Description	0%	1-25%	26-50%	51-75%	76-100%
A011	Crop growing	79.8	58.5	81.4	94.7	82.1
A012	Animal breeding	83.4	76.9		33.4	72.2
A013	Crop growing associated with animal breeding	79.1				88.6
A014	Services provided to agriculture and to the animal breeding sector (with the exception of services to sanitary-veterinary sector)	80.7		86.7		46.9
D151	Production, processing and canning of meat and meat products	84.7	80.0	81.8		88.3
D152	Processing and canning of fish and fish products	84.4	84.1			84.6
D153	Processing and canning of fruit and vegetables	78.9	87.4	92.4	87.8	93.7
D154	Production of vegetable oils and animal fats	83.6	162.9			94.5
D155	Production of dairy products	84.1		75.6	59.8	88.4
D156	Manufacture of milled products, starch and starch products	85.5	46.4		97.6	79.7
D158	Manufacture of other food products	84.5	78.8	70.8	69.1	88.4
D159	Beverage manufacture	72.1	67.3	71.9	70.6	77.6
D16	Manufacture of tobacco products	74.6	52.3			86.5
D17	Manufacture of textile products	84.8	89.3	82.2	97.0	68.5
D18	Manufacture of clothes items; preparation and dyeing of furs	75.3	47.7	107.8	77.7	86.4
D19	Leather production, leather goods and shoe manufacturing	75.1		52.9	78.4	78.9
D20	Wood processing and wood products manufacturing	74.4	80.7	68.3	71.0	81.8
D21	Paper and cardboard manufacturing	81.5			76.6	105.6
D22	Publishing houses, polygraphic products and reproduction of information materials	66.1	62.1	63.0	84.1	87.6
D23	Manufacture of coke, refined petroleum products	56.5			3.7	91.0
D24	Chemical industry	79.0	58.0	84.2	71.3	76.5
D25	Rubber and plastics industries	80.1	90.5	88.1	85.4	87.1
D26	Production of other products from nonferrous minerals	80.9	80.3	80.5	82.0	65.4
D28	Manufacturing finished metal products, machines and tools	77.9	77.5	92.7	100.0	75.1
D29	Manufacturing of machines and equipment	79.2	75.8	46.5	87.1	71.0
D31	Manufacturing machines and electrical devices	82.2		46.6		79.8

CAEM Code	Description	0%	1-25%	26-50%	51-75%	76-100%
D35	Production of other transportation vehicles	72.4		23.0	36.8	46.3
D36	Furniture manufacturing and other industrial activities	75.0	69.3	65.0		64.9
D37	Recycling waste and other dump waste	83.6			99.6	
E401	Production and distribution of electricity	90.0			73.6	90.9
E402	Production and distribution of gaseous fuels	85.0		98.4	80.7	93.5
F45	Constructions	80.7	76.1	64.8	84.9	76.3
G50	Sale, maintenance and repair of automobile and motorcycles; retail trade of fuel for transportation vehicles with internal combustion engines	85.2	91.0	80.0	87.8	86.3
G51	Wholesale trade and intermediation, exclusively trade of automobiles and motorcycles	86.1	78.0	84.5	89.7	84.2
G52	Retail trade; repair of household utensils and personal goods	82.9	81.0	82.3	88.0	79.1
H55	Hotels and restaurants	55.8	53.1	32.3	62.6	56.8
I60	Terrestrial transportation	82.6	62.9	73.3	78.1	96.5
I62	Air transportation	88.3	102.6	58.8		88.6
I63	Complementary and auxiliary transportation activities; tourism agencies	79.3	92.5	95.2	94.8	88.1
I642	Telecommunications	70.3	62.2	91.0	34.2	45.0
J65	Financial activities	88.3	65.7	79.2	57.8	44.7
K70	Real estate transactions	53.4	65.7	68.0	80.4	55.3
K71	Rent of cars, of operator free equipment and of personal goods and objects	68.4	28.3		86.9	44.0
K72	Hardware and related activities	67.2	93.8	73.9	76.9	60.2
K74	Other activities and services provided to enterprises	58.6	53.9	58.0	80.5	68.8
O90	Disposal of waste and sewage water; water cleaning and water treatment, other similar activities	76.1		100.0		
O92	Recreation, sports and cultural activities	63.8	73.4	49.9	84.4	72.1
O93	Provision of Individual services	64.1	85.8	85.1		407.6

Source: calculations of Expert Group based on the NBS data;

Annex 5.
Average rate of inventory turnover (sales revenue per stock value) per groups of economic activities and groups of enterprises according the foreign capital share in the total statutory capital and in the supplementary capital.

CAEM Code	Description	0%	1-25%	26-50%	51-75%	76-100%
A011	Crop growing	3.81	3.25	5.85	2.06	4.63
A012	Animal breeding	18.14	31.54			95.34
A013	Crop growing associated with animal breeding	3.93				3.23
A014	Services provided to agriculture and to the animal breeding sector (with the exception of services to sanitary-veterinary sector)	7.51		4.25		56.79
D151	Production, processing and canning of meat and meat products	12.87	10.47	16.33	0.69	28.34
D152	Processing and canning of fish and fish products	65.41	11.51			13.67
D153	Processing and canning of fruit and vegetables	2.92	2.42	2.29	7.00	7.71
D154	Production of vegetable oils and animal fats	16.46	79.29		1.11	2.79
D155	Production of dairy products	23.62		4.59	3.54	12.30
D156	Manufacture of milled products, starch and starch products	13.66	10.16	33.77	43.37	4.84
D158	Manufacture of other food products	14.81	6.11	0.99	2.27	5.12
D159	Beverage manufacture	1.97	2.56	1.65	1.83	2.44
D16	Manufacture of tobacco products	7.74	15.53			6.60
D17	Manufacture of textile products	8.24	3.26	20.19	12.72	14.33
D18	Manufacture of clothes items; preparation and dyeing of furs	12.93	30.09	25.65	29.55	32.88
D19	Leather production, leather goods and shoe manufacturing	13.83				3.58
D20	Wood processing and wood products manufacturing	14.21	6.27	24.33	14.71	351.61
D21	Paper and cardboard manufacturing	51.38		179.53	2.00	15.85
D22	Publishing houses, polygraphic products and reproduction of information materials	15.71	156.20	109.15	18.41	1433.44
D24	Chemical industry	29.26	5.01	10.56	12.70	11.02
D25	Rubber and plastics industries	17.65	13.83	12.93	14.89	17.69
D26	Production of other products from nonferrous minerals	11.25	14.34	10.20	14.10	18.72
D28	Manufacturing finished metal products, machines and tools	13.88	7.52	9.98	5.36	31.40
D29	Manufacturing of machines and equipment	5.27	6.61	36.85	62.64	2.67
D31	Manufacturing machines and electrical devices	42.02		416.20	113.71	42.89
D35	Production of other transportation vehicles	9.24				1.86

CAEM Code	Description	0%	1-25%	26-50%	51-75%	76-100%
D36	Furniture manufacturing and other industrial activities	14.34	5.18	9.52	7.69	25.39
F45	Constructions	8.03	2.92	4.62	3.09	10.46
H55	Hotels and restaurants	25.82	8.61	1278.95		14.02
J65	Financial activities					0.96
K70	Real estate transactions	15.56	25.91	6042.87	12.48	1.61
K71	Rent of cars, of operator free equipment and of personal goods and objects	32.34				
K74	Other activities and services provided mainly to enterprises	60.16	714.00	109.04		75.23

Source: calculations of Expert Group based on the NBS data;

*Annex 6.
Correspondence between exported products according to CSCI and categories
of activities according to CAEM.*

SITC Code	Name according to SITC	CAEM Code		
00	Live animals	A01210	A01222	A01230
		A01221	A01223	A01241
01	Meat and meat products	D15110	D15120	D15130
02	Dairy products and bird eggs	D15510	A01242	
		D15520	A01243	
03	Fish, crustaceans and shellfish	D15200		
04	Cereals and cereal products	A01111	D15612	D15820
		D15611	D15810	D15850
05	Vegetables and fruit	A01121	A01131	D15320
		A01122	A01132	D15330
		A01123	A01133	
		A01124	D15310	
06	Sugar, sugar products and honey	D15830	D15840	A01251
07	Coffee, tea, cocoa, condiments	D15860	D15870	
08	Animal food	A01115	D15710	D15720
09	Diverse products and edible composites	D15880	D15892	D15430
		D15891	D15899	
11	Beverages	D15910	D15940	D15970
		D15920	D15950	D15980
		D15930	D15960	
12	Tobacco and tobacco products	D16000		
21	Leather and unprocessed furs	D19101	D19102	
24	Cork and wood	D20101	D20102	D20103
25	Wood paste and paper waste	D21110		
26	Fibre textiles and their wastes	D17111	D17141	D17163
		D17112	D17142	D17164
		D17121	D17151	D17171
		D17122	D17152	D17172
		D17131	D17161	
		D17132	D17162	
42	Stable vegetable oils and fats	D15410	D15420	
51	Organic chemical products	D24141	D24149	
52	Non-organic chemical products	D24130		
53	Tanning or dyeing extracts	D24120	D24301	D24302
54	Medical and pharmaceutical products	D24410	D24422	
		D24421	D24423	
55	Essential oils, cosmetics and perfume products	D24510	D24520	D24630
56	Mineral or chemical fertilisers	D24151	D24152	
57	Plastic materials, primary forms	D24160		
58	Plastic materials, non-primary forms	D25210	D25230	
		D25220	D25240	

SITC Code	Name according to SITC	CAEM Code		
61	Leather products and processed furs	D18301	D18302	D18303
62	Rubber products	D25110	D25131	D25120
			D25132	
63	Cork and wood products (furniture excluded)	D20200	D20303	D20512
		D20301	D20400	D20520
		D20302	D20511	
64	Paper, cardboard and related items	D21211	D21220	D21240
		D21212	D21230	D21250
65	Wool, textile fibres and related materials and products	D17210	D17300	D17541
		D17220	D17400	D17542
		D17230	D17510	D17549
		D17240	D17521	D17600
		D17251	D17522	D17710
		D17259	D17530	D17720
66	Non-ferrous mineral products	D26110	D26250	D26632
		D26120	D26260	D26640
		D26131	D26300	D26650
		D26132	D26400	D26660
		D26140	D26510	D26700
		D26151	D26521	D26810
		D26152	D26522	D26821
		D26159	D26530	D26822
		D26211	D26611	D26823
		D26212	D26612	D26824
		D26220	D26613	D26825
		D26230	D26620	D26826
		D26240	D26631	
67	Iron and steel	D27100	D27310	D27340
		D27210	D27320	D27510
		D27220	D27330	D27520
68	Non-ferrous metals	D27410	D27451	D27455
		D27420	D27452	D27530
		D27430	D27453	D27540
		D27440	D27454	
69	Metal products	D28111	D28401	D28710
		D28112	D28402	D28720
		D28113	D28510	D28730
		D28114	D28520	D28740
		D28120	D28610	D28751
		D28210	D28621	D28752
		D28220	D28622	D28759
		D28300	D28630	
71	Electricity generating equipment and apparatus	D29111	D29225	D29242
		D29112	D29226	D29243
		D29119	D29229	D29244
		D29221	D29231	D29245
		D29222	D29232	D29248
		D29223	D29239	D29249
		D29224	D29241	

SITC Code	Name according to SITC	CAEM Code		
72	Apparatus specialised for certain industrial activities	D29311	D29524	D29551
		D29319	D29525	D29559
		D29321	D29529	D29561
		D29322	D29531	D29562
		D29323	D29539	D29563
		D29329	D29541	D29564
		D29511	D29542	D29565
		D29519	D29543	D29566
		D29521	D29544	D29567
		D29522	D29545	D29568
D29523	D29549	D29569		
73	Metal processing machinery, machine tools	D29410	D29420	D29430
74	Equipment, apparatus for basic industry	D29121	D29130	D29211
		D29122	D29141	D29212
		D29123	D29142	D29219
		D29129	D29149	
75	Computers and office equipment	D30010	D30020	
76	Telecommunication, TV, audio and video equipment	D32201	D32209	D32309
		D32202	D32301	
77	Electrical apparatus and equipment	D31101	D31501	D31623
		D31109	D31502	D31628
		D31201	D31611	D31629
		D31209	D31619	D29711
		D31300	D31621	D29712
		D31400	D31622	
78	Auto vehicles	D34101	D34201	D34301
		D34102	D34202	D34302
79	Other transportation equipment	D35111	D35208	D35410
		D35119	D35209	D35420
		D35121	D35301	D35430
		D35129	D35302	D35500
		D35201	D35309	
82	Furniture, beds, mattresses	D36110	D36130	D36150
		D36120	D36140	
83	Travel goods, bags and related items	D19201	D19202	
84	Clothing items and accessories	D18100	D18220	D18241
		D18210	D18230	D18249
85	Shoes	D19300		
87	Control professional and scientific instruments and apparatus	D33201	D33204	D33209
		D33202	D33205	D33301
		D33203	D33206	D33309
88	Photographic, optical apparatus, watches	D33401	D33409	D33503
		D33402	D33501	
		D33403	D33502	

SITC Code	Name according to SITC	CAEM Code		
89	Diverse manufactured items	D29600	D22240	D36620
		D22110	D22250	D36631
		D22120	D36220	D36632
		D22130	D36301	D36633
		D22140	D36309	D36634
		D22210	D36400	D36635
		D22220	D36500	D36636
		D22230	D36610	D36639
BOPS 262	Informatics and information services	K72100	K72220	K72500
		K72200	K72300	K72600
		K72210	K72400	

Source: Expert-Grup;

Annex 7.
Value of exports and estimated number of companies per categories of goods.

CSCI Code	Description	Value of exports, thousand USD					Number of foreign companies				
		2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
00	Live animals	1741.0	1956.7	3869.2	2179.8	367.3	3	4	5	6	7
01	Meat and meat products	11804.4	3214.8	3478.7	7516.3	2446.4	6	8	9	6	7
02	Dairy products and bird eggs	9436.0	14000.0	12373.1	7357.5	9203.6	7	7	9	8	8
03	Fish, crustaceans and shellfish	43.5	201.9	80.2	35.5	6.0	1	2	2	2	4
04	Cereals and cereal products	26682.9	46301.5	45320.4	21100.4	56759.5	23	17	21	25	27
05	Vegetables and fruit	107222.9	111683.9	112340.8	174090.1	140092.1	23	27	33	29	23
06	Sugar, sugar products and honey	4734.2	7872.0	19496.1	23882.9	16079.8	5	5	5	5	3
07	Coffee, tea, cocoa, condiments	1106.7	2284.4	2174.5	2280.4	2960.7	0	1	1	1	1
08	Animal food	8175.2	8182.9	8647.1	10767.3	17767.1	0	0	0	0	0
09	Diverse products and edible composites	796.2	920.6	974.7	2978.3	2057.1	4	3	4	3	3
11	Beverages	277820.3	314463.2	186410.6	135271.7	195777.0	41	43	44	46	45
12	Tobacco and tobacco products	8921.2	11893.8	10169.6	15356.3	18820.1	2	1	1	1	3
21	Leather and unprocessed furs	64895.5	56621.4	4543.5	6178.8	3532.0	1	1	1	2	2
24	Cork and wood	1414.6	1402.1	2152.5	2556.1	1935.5	4	4	6	5	4
26	Fibre textiles and their wastes	429.5	646.9	488.3	1218.6	355.0	1	1	1	0	0
42	Stable vegetable oils and fats	41060.7	37752.8	34781.6	54881.2	62777.4	2	3	3	3	4
51	Organic chemical products	214.8	274.3	710.4	360.4	369.0	0	0	0	0	1
53	Tanning or dyeing extracts	238.3	258.1	206.7	290.0	344.4	1	2	2	3	3
54	Medical and pharmaceutical products	3903.3	4669.5	10089.8	14754.8	16517.1	6	5	6	6	5
55	Essential oils, cosmetics and perfume products	3389.7	7743.5	8568.8	10002.8	13377.5	2	3	3	7	5
56	Mineral or chemical fertilisers	724.6	1439.1	185.1	250.3	205.2	0	0	0	0	0
57	Plastic materials, primary forms	384.2	1508.4	1025.1	2350.9	3905.6	1	2	3	2	2
58	Plastic materials, non-primary forms	474.2	1625.3	1565.3	1332.6	5052.9	14	14	16	23	28
61	Leather products and processed furs	2838.1	4056.6	5626.0	5024.3	7037.0	1	1	1	0	0
62	Rubber products	2081.0	2001.8	2202.3	10964.1	11937.3	1	0	1	1	1
63	Cork and wood products (furniture excluded)	2173.3	888.3	1835.8	1749.3	3455.0	11	11	10	9	8

CSCI Code	Description	Value of exports, thousand USD					Number of foreign companies				
		2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
64	Paper, cardboard and related items	6443.3	10001.2	15180.4	23231.9	11145.5	2	4	4	5	2
65	Wool, textile fibres and related materials and products	13781.9	22573.8	28006.2	37459.1	48853.8	10	9	12	19	21
66	Non-ferrous mineral products	17817.0	21111.5	34660.7	57267.2	52349.3	8	11	17	18	18
67	Iron and steel	14718.6	17339.5	31073.0	31185.9	56671.5	0	0	0	0	0
68	Non-ferrous metals	1253.3	85.2	110.2	877.0	2521.8	0	0	0	0	0
69	Metal products	6641.6	22521.5	31992.4	48836.3	42115.0	5	11	13	18	24
71	Electricity generating equipment and apparatus	2878.5	6703.3	1995.2	2723.8	4479.3	0	0	3	3	2
72	Apparatus specialised for certain industrial activities	13183.7	10441.2	10198.9	17339.4	15337.7	4	5	4	3	5
73	Metal processing machinery, machine tools	620.3	1133.8	1801.6	7418.7	3280.2	2	2	2	3	2
74	Equipment, apparatus for basic industry	15257.3	15114.4	17515.9	21838.6	24369.4	1	0	1	2	1
75	Computers and office equipment	904.5	879.4	1241.6	1924.5	1995.3	0	0	0	0	0
76	Telecommunication, TV, audio and video equipment	2040.3	2382.7	2735.3	3196.0	3139.1	1	1	1	1	0
77	Electrical apparatus and equipment	7451.6	11820.6	18904.3	39235.5	115680.1	3	3	4	8	7
78	Auto vehicles	9984.1	9457.4	11788.7	14756.3	12837.1	0	0	0	0	0
79	Other transportation equipment	10146.7	3594.1	1937.6	958.2	2198.9	1	1	1	1	3
82	Furniture, beds, mattresses	4826.7	10216.4	17548.1	30678.9	44087.1	7	7	9	13	14
83	Travel goods, bags and related items	10068.0	10865.5	13127.5	17487.5	21403.5	0	1	2	3	3
84	Clothing items and accessories	156108.9	170962.9	200369.4	238316.2	266607.9	28	36	49	57	67
85	Shoes	21859.9	26442.0	30750.9	39897.4	47555.4	2	3	5	9	9
87	Control professional and scientific instruments and apparatus	6813.8	7671.8	12102.1	22886.5	27862.4	2	2	3	3	4
88	Photographic, optical apparatus, watches	980.6	427.0	603.1	685.5	903.6	0	0	0	0	0
89	Diverse manufactured items	10150.8	13192.7	22140.9	31602.6	32522.1	12	16	17	21	17
B262	Informatics and information services	2630	3640	7970	14270	26270	19	37	50	68	86

Source: Authors' estimates based on NBS data;

Annex 8.
Number of companies with foreign capital and median sales value of companies without foreign capital, MDL per company

CAEM Code	Description	Number of companies with foreign capital								Sales values per companies without foreign capital, MDL per company							
		2004	2005	2006	2007	2008	2004	2005	2006	2007	2008						
A011	Crop growing	20	22	30	29	30	2490996	2629770	2393922	2174660	3067537						
A012	Animal breeding	3	5	6	6	8	3398727	3971545	4191094	4565453	7386351						
A013	Crop growing associated with animal breeding				1	2	3658667	4645829	4414835	4816392	4929045						
A014	Services provided to agriculture and to the animal breeding sector (with the exception of services to sanitary-veterinary sector)	2	2	2	2	5	1301457	1635156	1091453	1189917	1361242						
D151	Production, processing and canning of meat and meat products	6	8	9	6	7	8002331	8892545	9404203	12445363	14832034						
D152	Processing and canning of fish and fish products	1	2	2	2	4	2112327	2629219	4150257	4259978	11717980						
D153	Processing and canning of fruit and vegetables	13	14	17	17	11	7957152	8704256	9172719	13396433	9642314						
D154	Production of vegetable oils and animal fats	2	3	3	3	4	7411211	9495386	9868339	13974589	19787023						
D155	Production of dairy products	7	7	8	8	7	34469943	66529772	67396375	80056382	97083502						
D156	Manufacture of milled products, starch and starch products	8	6	5	4	5	1198765	894931	933546	1191510	2255650						
D158	Manufacture of other food products	19	16	19	20	18	5194717	5713529	6551472	6990908	8790356						
D159	Beverage manufacture	41	43	44	46	45	15461317	18221998	11695647	9351610	11928043						
D16	Manufacture of tobacco products	2	1	1	1	3	20207872	18105977	18510617	25549278	26573672						
D17	Manufacture of textile products	11	10	13	19	21	2732063	3399726	2670567	3633595	7516033						
D18	Manufacture of clothes items; preparation and dyeing of furs	29	37	50	57	67	2095916	2089203	2147237	2154167	1846148						
D19	Leather production, leather goods and shoe manufacturing	3	5	8	14	14	3266829	4027195	4104169	4646614	4478596						
D20	Wood processing and wood products manufacturing	15	15	16	14	12	529239	619263	630446	751901	1166375						

CAEM Code	Description	Number of companies with foreign capital								Sales values per companies without foreign capital, MDL per company							
		2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	
D21	Paper and cardboard manufacturing	2	4	4	5	2	8994247	11387354	6813481	8289561	9856866						
D22	Publishing houses, polygraphic products and reproduction of information materials	10	12	14	19	16	1523801	1656696	1548634	1728166	1886401						
D23	Manufacture of coke, refined petroleum products		1	1	2	1428296				51475965							
D24	Chemical industry	11	13	16	20	19	2905355	4943017	6615476	9251923	10867748						
D25	Production of rubber and plastics items	15	14	17	24	29	2186714	2785797	2988702	3389792	3326548						
D26	Production of other products from nonferrous minerals	8	11	17	18	18	6419688	7306133	5730010	5950068	6536620						
D28	Manufacturing finished metal products (machines and tools, excluded)	5	11	13	18	24	1628312	1810431	2282452	2677980	3052382						
D29	Manufacturing of machines and equipment	8	8	11	13	14	3318467	3495027	3874209	3560050	3770354						
D31	Manufacturing machines and electrical devices	2	2	4	6	5	3037899	2928382	3063132	7121046	4248192						
D35	Production of other transportation vehicles	1	1	1	1	3	772348	2500233	3247330	5222364	6073856						
D36	Furniture manufacturing and other industrial activities	9	11	13	16	16	1742081	2152948	2293326	2267202	2484153						
D37	Recycling waste and recyclable refuse materials	3	2	2	1	1	22849717	36935503	55763640	58886774	45062037						
E401	Generation and distribution of electricity	4	3	5	5	3	76460183	84962373	117444773	157975545	207982819						
E402	Production and distribution of gaseous fuels	1	1	2	2	3	89531489	112198424	153299177	229767616	285674231						
F45	Constructions	33	35	51	63	60	2494949	3262668	4237382	5068092	5333390						
G50	Sale, maintenance and repair of automobile and motorcycles; retail trade of fuel for transportation vehicles with internal combustion engines	27	31	38	43	45	2926795	3335158	4169640	4855192	5936571						
G51	Wholesale trade and intermediation, trade of automobiles and motorcycles excluded	353	419	464	497	517	4432535	5353890	5685158	7179974	8393507						

CAEM Code	Description	Number of companies with foreign capital				Sales values per companies without foreign capital, MDL per company					
		2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
G52	Retail trade; repair of household utensils and personal goods	108	123	133	169	187	1553738	1786700	2106323	2277916	2995500
H55	Hotels and restaurants	27	36	42	59	62	526407	626980	720413	912995	1197300
I60	Terrestrial transportation	29	29	30	37	31	5593406	5686586	7269007	8033468	5151720
I62	Air transportation	8	8	7	7	7	38766580	36302835	52851362	64948756	82302117
I63	Complementary and auxiliary transportation activities; tourism agencies	45	53	58	60	54	2689764	3237076	3843504	4338865	5191620
I642	Telecommunications	20	24	25	34	38	10193151	9047249	8250371	8837652	11621254
J65	Financial activities	8	7	13	18	21	2158858	2170529	3299809	6696866	8318600
K70	Real estate transactions	45	46	80	85	117	563947	534928	604748	690621	947405
K71	Rent of cars, of operator free equipment and of personal goods and objects	11	12	16	18	13	257081	336887	593494	405776	433875
K72	Hardware and related activities	19	37	50	68	86	1500605	2343601	1856559	2275426	2547195
K74	Other activities and services provided to enterprises	72	88	119	163	189	1774837	1975235	2321411	1229918	1303552
O90	Disposal of waste and sewage water; water cleaning and water treatment, other similar activities					1	1615097	1712336	2040887	2172950	2717381
O92	Recreation, sports and cultural activities	18	23	28	32	30	878672	1132687	1636407	2082635	2086071
O93	Provision of individual services	4	6	7	8	6	190917	213514	240659	273592	247059

Annex 9.
Total number of employees per sector, in companies without foreign capital and in companies with foreign capital, persons

CAEM Code	Description	total						companies without foreign capital						companies with foreign capital					
		2004	2005	2006	2007	2008		2004	2005	2006	2007	2008		2004	2005	2006	2007	2008	
A011	Crop growing	105032	96530	81805	67311	57822		104352	95761	80926	66300	56662		680	769	879	1011	1160	
A012	Animal breeding	2592	2812	3185	3219	3067		2584	2801	3123	3187	2961		8	11	62	32	106	
A013	Crop growing associated with animal breeding	14614	12695	10384	8672	7737		14614	12695	10384	8652	7702					20	35	
A014	Services provided to agriculture and to the animal breeding sector (with the exception of services to sanitary-veterinary sector)	4988	4724	3613	3027	2971		4856	4621	3555	2995	2923		132	103	58	32	48	
D151	Production, processing and canning of meat and meat products	2929	3148	3432	3442	3491		2735	2934	3148	3177	3310		194	214	284	265	181	
D152	Processing and canning of fish and fish products	229	335	246	297	521		174	134	121	177	318		55	201	125	120	203	
D153	Processing and canning of fruit and vegetables	6353	6765	6429	5680	4889		5629	5537	5103	4589	4018		724	1228	1326	1091	871	
D154	Production of vegetable oils and animal fats	1416	1474	1478	1375	1312		1404	1403	1380	1327	1252		12	71	98	48	60	
D155	Production of dairy products	4334	4172	4362	4239	4344		3845	3674	3925	3752	3933		489	498	437	487	411	

CAEM Code	Description	total				companies without foreign capital				companies with foreign capital						
		2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
D156	Manufacture of milled products, starch and starch products	2366	2087	2015	1687	1796	2059	1870	1767	1632	1756	307	217	248	55	40
D158	Manufacture of other food products	12450	12649	12467	12218	11474	10218	10451	10537	10525	10218	2232	2198	1930	1693	1256
D159	Beverage manufacture	20759	21597	20021	17132	16687	14628	14994	13973	11303	10568	6131	6603	6048	5829	6119
D16	Manufacture of tobacco products	2301	2257	2012	1659	1536	2235	2216	1971	1617	1434	66	41	41	42	102
D17	Manufacture of textile products	4958	3640	3753	3944	3707	3338	2746	2587	2657	2782	1620	894	1166	1287	925
D18	Manufacture of clothes items; preparation and dyeing of furs	18026	19730	20895	20791	19906	11592	10221	9829	8903	7516	6434	9509	11066	11888	12390
D19	Leather production, leather goods and shoe manufacturing	3902	3951	4366	4664	4456	3474	3529	3562	3633	3085	428	422	804	1031	1371
D20	Wood processing and wood products manufacturing	2115	2212	2063	1992	1769	1763	1798	1674	1729	1547	352	414	389	263	222
D21	Paper and cardboard manufacturing	1617	2086	2012	1889	1810	704	1127	1152	1048	1071	913	959	860	841	739
D22	Publishing houses, polygraphic products and reproduction of information materials	4433	4440	4505	4312	4135	4218	4230	4345	4146	3979	215	210	160	166	156
D23	Manufacture of coke, refined petroleum products	22	108	82	82	89	22	22	71	108	82	108	82	18	18	18

CAEM Code	Description	total					companies without foreign capital					companies with foreign capital									
		2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008					
D24	Chemical industry	1894	1967	2146	2138	2361	1894	1967	2146	2138	2361	1432	1456	1585	1635	1792	462	511	561	503	569
D25	Production of rubber and plastics items	2264	2447	2707	3217	3554	2264	2447	2707	3217	3554	1832	1913	2029	2393	2548	432	534	678	824	1006
D26	Production of other products from nonferrous minerals	7619	7707	7747	8159	7240	7619	7707	7747	8159	7240	6717	6613	6133	6569	5671	902	1094	1614	1590	1569
D28	Manufacturing finished metal products, (machines and tools are excluded)	3846	4274	4480	4690	4996	3846	4274	4480	4690	4996	3684	4006	4206	4385	4599	162	268	274	305	397
D29	Manufacturing of machines and equipment	7896	7272	6688	5940	5235	7896	7272	6688	5940	5235	6555	6149	6094	5404	4676	1341	1123	594	536	559
D31	Manufacturing machines and electrical apparatus	1499	1561	1588	1800	2731	1499	1561	1588	1800	2731	1417	1490	1429	1284	1177	82	71	159	516	1554
D35	Production of other transportation vehicles	140	133	146	158	154	140	133	146	158	154	137	130	144	145	147	3	3	2	13	7
D36	Furniture manufacturing and other industrial activities	3095	4217	4577	5377	4959	3095	4217	4577	5377	4959	2974	3788	4269	4662	4559	121	429	308	715	400
D37	Recycling waste and recyclable refuse materials	445	386	419	502	444	445	386	419	502	444	372	343	397	499	443	73	43	22	3	1
E401	Generation and distribution of electricity	6508	6368	6418	6122	5997	6508	6368	6418	6122	5997	4732	4807	4762	4699	4690	1776	1561	1656	1423	1307

CAEM Code	Description	total				companies without foreign capital				companies with foreign capital						
		2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
E402	Production and distribution of gaseous fuels	3871	4061	4339	4531	4564	3762	3953	4226	4419	4331	109	108	113	112	233
F45	Constructions	24509	27186	30728	34126	34937	23923	26677	29554	32663	33612	586	509	1174	1463	1325
G50	Sale, maintenance and repair of automobile and motorcycles; retail trade of fuel for transportation vehicles with internal combustion engines	7135	7861	8059	10193	10716	6578	7388	7389	7646	7947	557	473	670	2547	2769
G51	Wholesale trade and intermediation, exclusively trade of automobiles and motorcycles	31543	33818	36279	38676	41788	25005	25826	27047	29809	31765	6538	7992	9232	8867	10023
G52	Retail trade; repair of household utensils and personal goods	37243	40117	43499	46790	50591	35200	37689	40317	42965	45552	2043	2428	3182	3825	5039
H55	Hotels and restaurants	8637	9244	10202	11453	12370	7761	8328	9014	10006	10670	876	916	1188	1447	1700
I60	Terrestrial transportation	34053	34053	33110	35597	36289	33666	33490	32824	35285	35978	387	563	286	312	311
I62	Air transportation	1302	1381	1409	1349	1203	983	1054	1001	985	895	319	327	408	364	308
I63	Complementary and auxiliary transportation activities; tourism agencies	10105	9872	9486	9431	7524	9391	9226	8849	8649	6732	714	646	637	782	792
I642	Telecommunications	9241	9647	9924	10259	9590	8494	8773	8984	8975	8224	747	874	940	1284	1366

CAEM Code	Description	total				companies without foreign capital				companies with foreign capital						
		2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
J65	Financial activities	561	607	755	918	936	399	403	436	479	504	162	204	319	439	432
K70	Real estate transactions	10471	10215	10680	11033	14170	9682	9458	9581	10074	12503	789	757	1099	959	1667
K71	Rent of cars, of operator free equipment and of personal goods and objects	485	438	430	387	485	442	388	375	330	448	43	50	55	57	37
K72	Hardware and related activities	2943	3768	5686	6396	6598	2571	3296	5020	5397	5213	372	472	666	999	1385
K74	Other activities and services provided to enterprises	13904	15092	15962	17234	18049	12597	13754	14854	15905	16037	1307	1338	1108	1329	2012
O90	Disposal of waste and sewage water; water cleaning and water treatment, other similar activities	2107	2419	2311	2469	2566	2107	2419	2311	2436	2551				33	15
O92	Recreation, sports and cultural activities	5206	6237	7083	7615	7108	4598	5447	6159	6304	5559	608	790	924	1311	1549
O93	Provision of individual services	1814	1932	1922	2066	2043	1773	1876	1855	1991	1983	41	56	67	75	60
Total per column		455772	461584	457931	456258	452717	413228	412882	403906	397342	387912	425444	48702	54025	58916	64805