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Financialisation and the Financial and Economic  
Crises: The Case of Estonia

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## Financialisation and the Financial and Economic Crises: The Case of Estonia

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**Abstract:** This study on Estonia examines the long-run changes between the financial and the non-financial sectors of the economy, and in particular the effects of financialisation on key variables / categories of the real economy as well as the their contribution to the financial crisis of 2007/08. The first part provides the background historical overview of last 20 years in Estonia with some descriptive statistics on GDP, growth contributions of the main demand aggregates, and the financial balances of the macroeconomic sectors since early 1990s, and it classifies the Estonian development path as following the 'debt-led consumption' one. The following chapters examine the effects of financialisation and their extent, accompanied by transition processes, on income distribution, financing of capital stock investments, consumption and current account dynamics in detail. The final parts deal with the elaboration on the causes of the financial and economic crisis as well as the policy response in Estonia.

**Key words:** current account balance, trade balance, income distribution, finance-dominated capitalism, transition economies, financialisation, financial and economic crisis, Estonia.

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## 1. INTRODUCTION

Within the broader objective of analyzing the channels of transmission from financialization to the crisis beginning in 2007/08, the current paper envisages to address the nature and patterns of income distribution, investment financing, household consumption, and eventual crisis in 2007/08 in Estonia. The paper explores these categories by relying on previously undertaken studies, statistical evidence, country's reports, and other analyses on the topic. The study will be structured as following: Introduction will be followed by a sub-chapter on the presentation of Estonian historical socio-economic development and growth pattern during the transition period after regaining independence in 1991 within the varieties of capitalism perspective. Chapters 2 to 5 are dedicated to the analysis of income distribution, capital stock investments, household consumption, and current account developments in Estonia from mid-1990s (1995 onwards), as the earliest available reliable data<sup>1</sup>. Final chapters of the paper bring out the main features of the crisis of 2007 in Estonia – its causes and manifestations – and the main conclusions.

### 1.1 Estonian Development and its Position in the Varieties of Capitalism Perspective

After regaining independence in 1991, Estonia undertook major economic and administrative reforms in order to reinstate institutions necessary for the functioning market economy. Introduction of market institutions took time and some of them being established only by the turn of the millennium. Also, given the land area of 45,227 km<sup>2</sup> and the population of 1.29 million, all reforms and institutional arrangements should be seen in the context of a very small-sized country that have impacted on the development path of the economy and the state structures. Moreover, in contrast to advanced economies with long capitalist tradition, the legacy of socialism provided a quite different starting point and a footprint for the following evolution of the capitalist production in Estonia (see Myant and

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<sup>1</sup> The reliability of profit and other figures in the early 1990s is questionable, as at that time immature accounting practices and loopholes in legal framework led to the manipulation of figures in reporting (Terk 1999, 160).

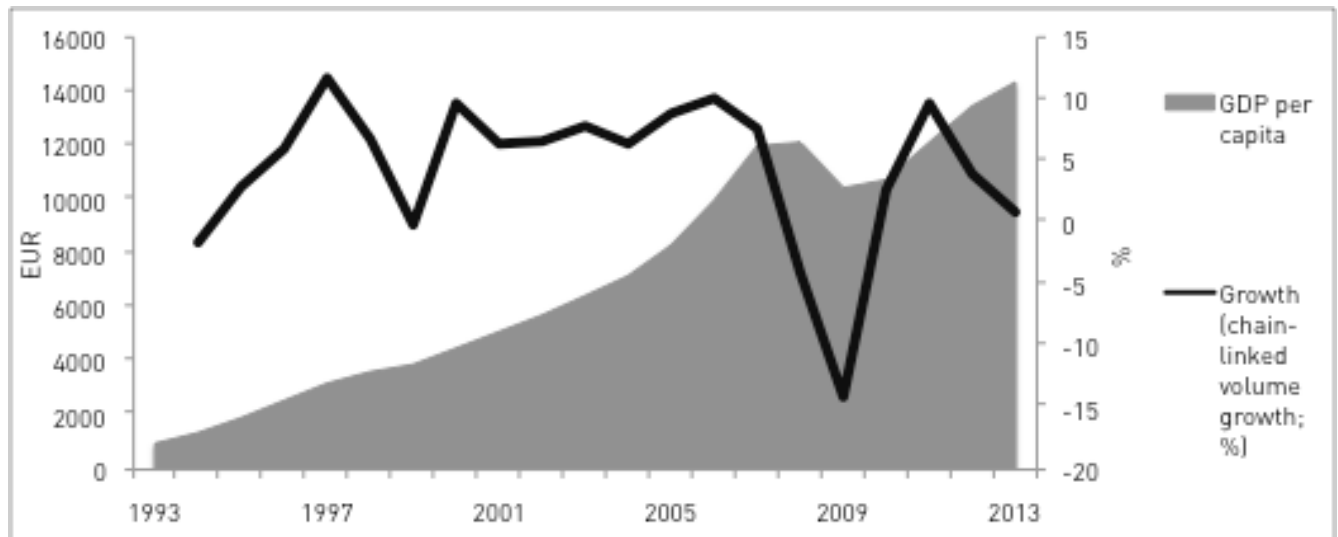
Drahokoupil 2011, 299-302; Lane 2007, 13-15]. It was institutional and historic-cultural characteristics that yielded a particular result in Estonia that has implied diverging transition processes towards capitalist economic system, compared to advanced Western economies, but also other Central and Eastern European countries (CEECs). Several institutional approaches and arrangements, such as 'strategic investor' privatization strategy, neo-liberal radicalism in market reforms, nationalistic sentiments in socio-economic affairs, etc. created path dependencies in the Estonian transformation process (see Tridico 2011; Lane and Myant 2007; Knell and Srholec 2007). In addition, punctuated by major crises, the period of 1993-1998 witnessed critical juncture points at which key decisions on the shape of post-socialist capitalism were taken (Bohle and Greskovits 2012). Consequently, reservations have to be made when drawing conclusions on the pattern of financialization process with its implications for economic (in)stability and general macro-economic dynamics within the four categories of the current study, when compared to the ones experienced in advanced Western market economies. Hence, it is not such a straightforward matter to undertake an analysis of the Estonian case due to non-presence or immaturity of capitalist institutions, lacking developments and phenomena, limited time-range for a full development of economies structures, and inadequate data on some of the issues due to insignificance in the Estonian case.

Compared to Western economies, one of the characteristics of Estonia has been low level of internally financed capital accumulation that has implied reliance on foreign direct investments (FDI) and other external funds since the early 1990s. Foreign investments have played a significant role in the development of the economy, as Estonia held the second place in Central and Eastern Europe for a long time with regard to the cumulative per capita FDI (Gerndorf *et al.* 1999). One of the reasons behind these tendencies has been liberalization and de-regulation of financial systems as well as delegation of powers to international institutions, such as the European Union (EU). In Estonia, FDI was seen as a supplement to internal resources for financing the growth and restructuring of the

economy (Bank of Estonia 1995; Bank of Estonia 1998). More importantly, such a growing internationalization of economic activities in the form of international competition and cross-border control has had a major impact on the form of capitalist production and ramifications for macro-economic stability (see Lane and Myant 2007; Whitley 2000).

The openness of the economy in terms of rapid liberalization of restrictions on prices, trade and capital flows was the reflection of the neo-liberal political stance of the government(s) and its aspiration to adopt 'Western standards' in terms of copying many policies from Washington Consensus toolbox or from the EU policies in the build-up of the country's legal and institutional framework. As the neoliberal toolbox would prescribe, Estonia has not relied on intensive intervention into the economy nor used any foreign investment management policies beyond macro-economic reforms oriented towards price stability, balanced public budgets and low taxes (Tiits *et al.* 2008; Hagelberg 1998; OECD 2000a; Thorhallsson and Kattel 2012; Raudla and Kattel 2011). Given such an approach and the perception of Estonia as a potential satellite hub, Swedish and Finnish investors acquired privatized companies in Estonia, but also undertook green-field investments due to relatively skilled and cheap labor force, while the geographical closeness and cultural ties with Estonia created additional incentives to relocate production to Estonia (Ehrlich *et al.* 2002; Madureira *et al.* 2007; EBRD 1994; European Commission 2010; Jevcák *et al.* 2007). Hence, throughout the years, the external actors such as the EU institutions, Scandinavian parent banks, and leading foreign-owned non-financial companies have had a major impact on the development and growth path of the Estonian economy.

**Figure 1. GDP growth in Estonia, 1993-2013**



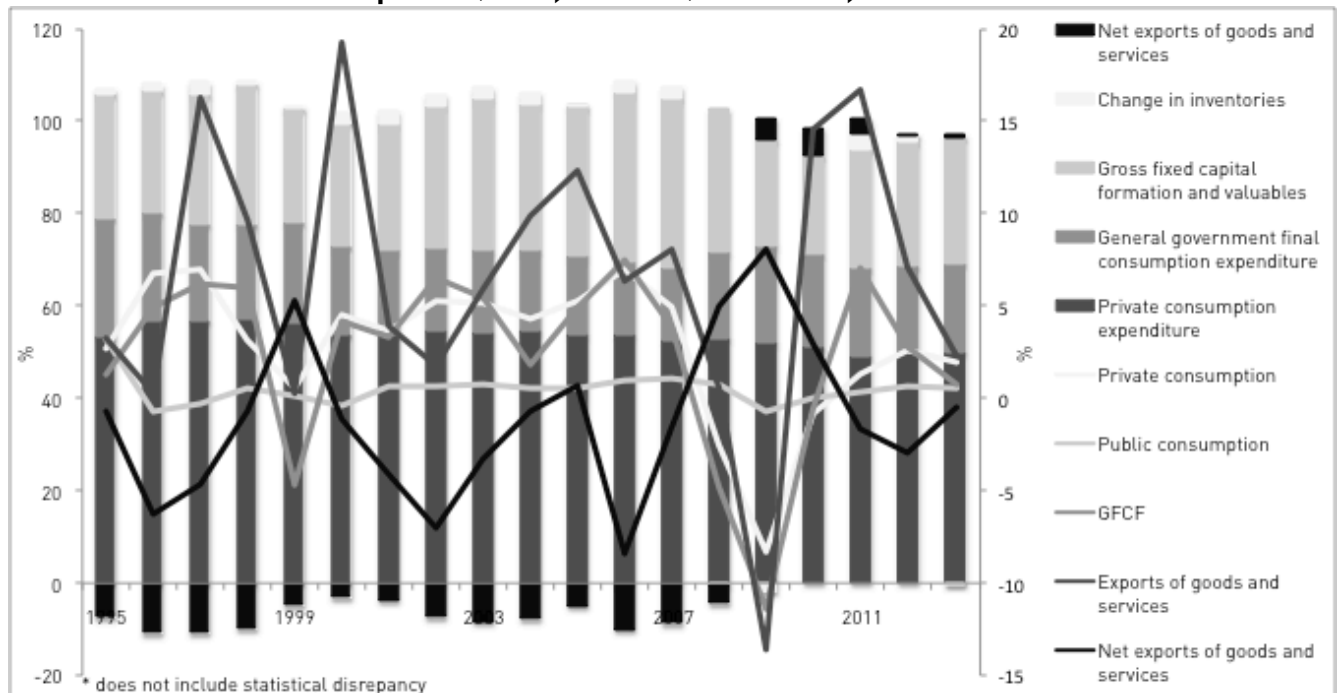
Source: Bank of Estonia statistics 2014; IMF World Economic Outlook data 2014

Although relatively high productivity growth and capital deepening, which has been caused by free mobility of financial capital and substantial FDI inflows, have upheld rapid economic growth in Estonia (see Figure 1; Kattai 2011, 60), several weaknesses in the productive system have been incurred by the business models of multinational companies in both financial and non-financial sectors. Affected by the increasing re-specialization into services sector, the weakening of the industrial base, which was caused by the inability of manufacturing industry to withstand intensifying foreign competition<sup>2</sup>, was worsened further by the decisions of foreign companies to relocate low value added labor-intensive stages of production to Estonia. Efficiency-seeking motives of foreign investors to yield short-term gains in the manufacturing did not create spillover effects in Estonian

<sup>2</sup> Several authors (Grigoriev and Abigalov 2011; Reinert and Kattel 2007) have elaborated on the effects of liberalization on the economy with the focus on ensuing deindustrialization and the destruction of advanced economic activities with high-growth potential. Accompanied by the demolition of complex cluster-like vertically integrated economic structures in the privatization process, rapid liberalization hit the most advanced industries first and also hardest, which paved the way to deindustrialization in terms of specialization at the lower end of the value chain with grave difficulties of upgrading. In principle, the restructuring of the Estonian economy in the 1990s entailed de-linking processes, enclavization, and essentially the primitivization of productive capacity that subdued demand for external, bank-based financing (Kattel 2010, 54). That said, the restructuring of the economy has been affected primarily by foreign capital.

industries nor significantly upgrade or diversify the industrial production, which was suffering from the 'primitivization' and technological backwardness (Drechsler *et al.* 2006, 20). There was a rapid increase of intra-industry trade in the manufacturing sector between Nordic countries and Estonia, reflected in the higher export propensity among foreign-owned firms than among domestic firms (see Varblane and Ziatick 1999; Ehrlich *et al.* 2002, 5-6). Hence, by taking advantage of low labor costs and taxes without notable wider positive effects on the whole economy, foreign-owned companies have entailed the 'enclavization' of the significant part of the industrial sectors by rendering the acquired businesses in Estonia into simple arm extensions of multinational companies (see Reiljan 2006, 256; Purju 1996; Gallagher and Zarsky 2007 on the concept of enclave economy). The implications have been asymmetrical trade relations with Estonia specializing in resource- and labor-intensive activities for subcontracting exports, while Scandinavian countries keeping knowledge- and technology-intensive areas (Tiits *et al.* 2008; OECD 2000b). Essentially, heavy dependence on FDI has rendered the Estonian economy into a *satellite-platform* (see Markusen 1999, 21-41) that reinforced the reliance on external funding, technical expertise and services, and hazardous lock-in effects. In these circumstances, banks that were acquired by foreign financial institutions gradually shifted focus in their credit policy to households, which is also seen in the main demand aggregates contributing to the growth (see Figure 2).

**Figure 2. Contribution to the increase of GDP at constant prices (lines; right axis) and Share\* in GDP in current prices (Bars; left axis) in Estonia, 1995-2013**



Source: Statistics Estonia 2014

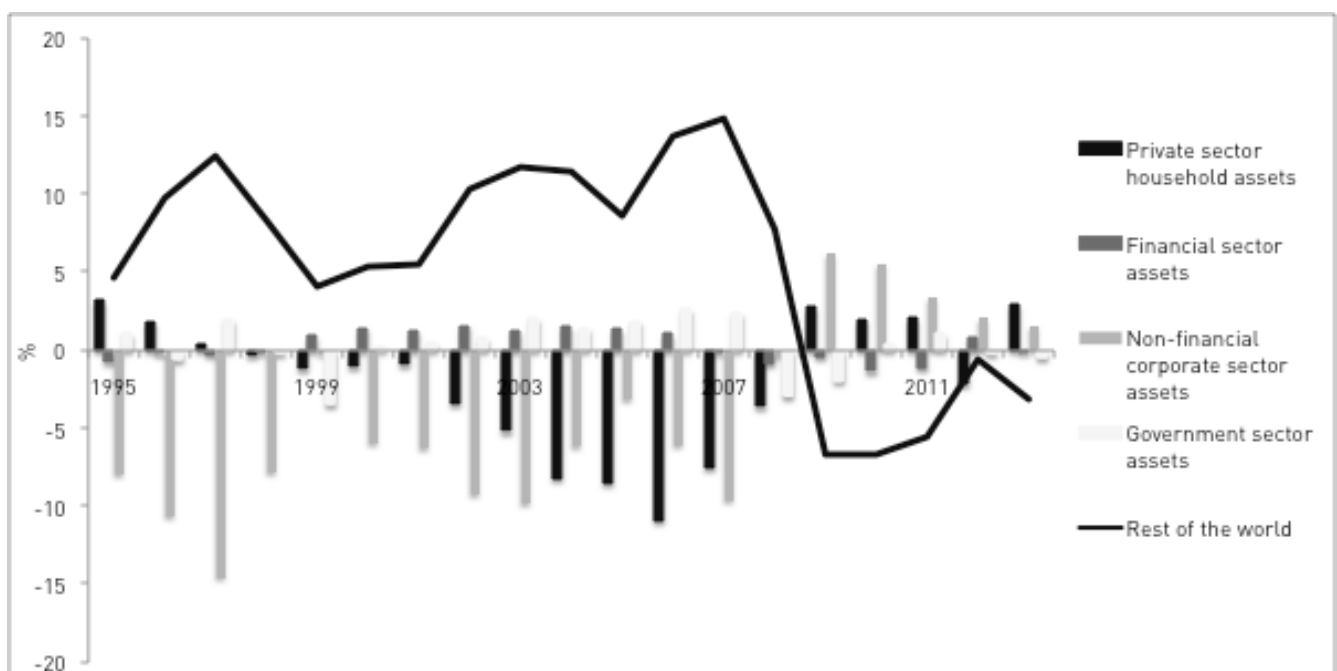
The consequence of these developments in the financial and non-financial sectors has been a dualistic structure of the economy: industries in Estonia have been led by large and medium-sized companies that in majority belong to foreign owners and do not rely on local economic infrastructure in terms of financing and demand conditions due to their focus on export markets<sup>3</sup>. Micro and small enterprises, on the other hand that predominantly are run in the services sector, target local market and are owned by local investors. Therefore, the ‘miracle’ of Estonia’s growth has been achieved on the basis of extensive external borrowing, as domestic savings have not been sufficient to cover persistently high

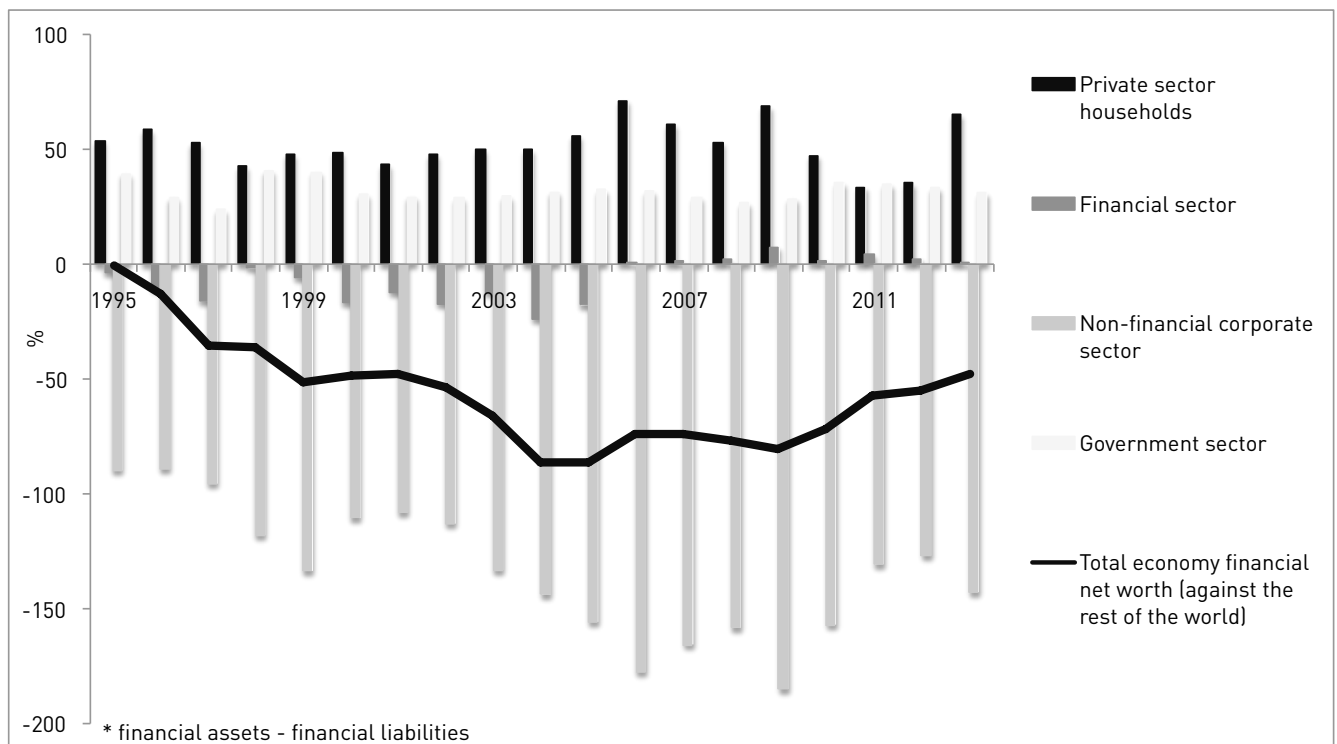
<sup>3</sup> Aside from foreign ownership, there has been intensive concentration in most of the economic sectors in terms of exports and sales. While about 10-20 companies have controlled 60-70 per cent of the market in terms of the output in their designated industry in food manufacturing industry, metal processing industry, chemical industry etc., 80 of the largest exporters producing machinery and mechanical appliances, electrical equipment, wood articles, and articles of base metal, accounted for more than 50 per cent<sup>3</sup> of Estonian exports in 2004 (Tiits 2007, 22, 60; Ehrlich *et al.* 2002, 16).



investment and consumption demand since late 1990s, but in particular during the booming years in mid-2000s (see OECD 2000b; Bank of Estonia 2006a; Bank of Estonia 2007a). Consequently, the challenge is to depart from the path dependency that was set in the 1990s on the political level as well as in the economic structure whereby the financialization process in Estonia was unveiled in a reliance on foreign capital of both financial and non-financial sectors (see Figure 3) that underpinned rapid but unsustainable economic growth, which culminated in financial crisis in 2007/08.

**Figure 3. Net financial transactions (% of GDP) & Financial balance\* (% of GDP) of institutional sectors in Estonia, 1995-2013**





Source: Statistics Estonia 2014; Bank of Estonia 2014; OECD Statistics 2014

Given the (rapid) transformation process with its peculiarities, as just stated, there have been attempts to classify CEECs, including Estonia, within the varieties of capitalism (VoC) perspective. Yet, the typologies in the VoC approach, as advanced by Hall and Soskice (2001), Amable (2003) and Coates (2000), have been criticized for not being able to capture the dynamics of economic systems in CEECs that have been subject to transformation processes. Rather, peculiar features of the Estonian economy could be addressed from either small states or transition economies' perspectives. Nonetheless, pursuant to the VoC approach, Buchen (2007) and Feldmann (2006, 2007) have presented Estonia regarding its institutional settings in the capitalist transformation along the liberal market economy trajectories. Similar conclusions were reached by Knell and Srholec (2007) who tried to group CEECs according to multiple parameters, such as social cohesion, labor market regulation, and business regulation on the axis of liberal-coordinated economic system, with liberal market coordination prevailing in Estonia. Also, Aidukaite (2011) has characterized Estonia as a neo-liberal welfare state, given its low social expenditures level,

high income inequality, low minimum wage, and low decommodification level. More detailed typologies of CEECs have been presented by Myant and Drahokoupil (2011) who proposed five varieties of capitalism that emerged in transition countries, linking the forms of international integration to other key features of these economies, including the nature of property rights, the role of the state, and relations between the state and main economic actors. Estonia has been classified into the 'peripheral market economies' category with weak manufactured-goods export structure and reliance on financialized development with low levels of welfare provision. Dependence on financialized growth implied international integration by foreign borrowing and financial inflows to support private-sector activity, including consumption, and to cover current account deficits. Fixed exchange rates, capital account liberalization, light-to-no-touch regulation of lending, and low-to-zero taxation on capital gains were particularly favorable to financialized development in Estonia and other Baltic States, countries that lacked sound export structures and domestic deposit bases (*ibid.*). Similar characterization was presented by Bohle and Greskovits (2012), who classified Estonia into a neoliberal type<sup>4</sup> of capitalist production. The Estonian regime has embodied a combination of market radicalism with inadequate industrial policies to capture promising market niches and meager social safety nets, reflected in limited influence of social groups in policymaking and trade unions (*ibid.*).

As evident in the statistical data, presented in the figures above, and an overview of qualitative shifts in the Estonian socio-economic sphere, one can observe a gradual embeddedness of the 'debt-led consumption boom' in the typology of long-term development pattern (see Hein 2012). However, this is not characterized by the negative financial balance of households, but of non-financial corporate sector, although the financial balance of households has deteriorated throughout the years. Worsening financial

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<sup>4</sup> Parallels could be drawn with one of the two socio-economic models – continental European and Anglo-Saxon – with preference given to the Anglo-American model in Estonia, revealed in the emphasis on more individualistic features (see Lane and Myant 2007; Buchen 2007; Mykhnenko 2007; Feldmann 2007; Alfred *et al.* 2012).

position of households is evident in the increasing net incurrence of financial liabilities that outpaced the acquisition of financial assets from late 1990s till the 2008 crisis. Moreover, claims of the rest of the world against Estonia have steadily increased until the collapse of 2007/08, accompanied by the widening current account deficits that turned positive for the first time after 1993 in 2009, but turned negative again in 2012. Yet, the trade account has been positive from 2009, revealing the vulnerability of the economy in terms of increasing FDI-related income outflows on the income account due to development strategy built around the reliance on FDI-led growth (see more in Section 5 on current account).

To sum up, financialization in Estonia has taken a rather different manifestation, which could be interpreted as a heavy reliance on foreign savings in financing economic growth. In this regard, FDI-led catching-up process has affected to great extent all four studied variables of the Estonian real sector. Moreover, when considering the long-term effects of financialization on the real sector variables, one has to bear in mind that the period of the market economy itself in Estonia has been very short – around 20 years. So, many dynamics in the economy are rather attributable to transition process to market economy than to the financialization processes, which presents some controversies in the Estonian case and makes it problematic to distinguish transition effects from financialization effects or to see the financialization processes in the ‘conventional’ understanding of the term behind the transition process. Similarly, it has been challenging to classify Estonia into one or another category within the varieties of capitalism framework due to rapid and radical changes in the socio-economic and institutional environment. Yet, in broad terms, Estonia could be classified as following the debt-led consumption development pattern, in particular in 2000s, with gradually deteriorating financial balance against the rest of the world until 2009. Thus, in general, Estonia is seen as neo-liberal ‘peripheral market economy’ with structural weaknesses in the economy, particularly in the export structure and industries, and reliance on financialized development that essentially has meant dependence on foreign borrowing and other financial inflows to support private-sector

activity, including consumption, and to cover current account deficits. On top of it, the development story of last 20+ years has revealed peculiar features that are barely detectable in other economies (e.g. almost 100 per cent foreign ownership in the banking sector).

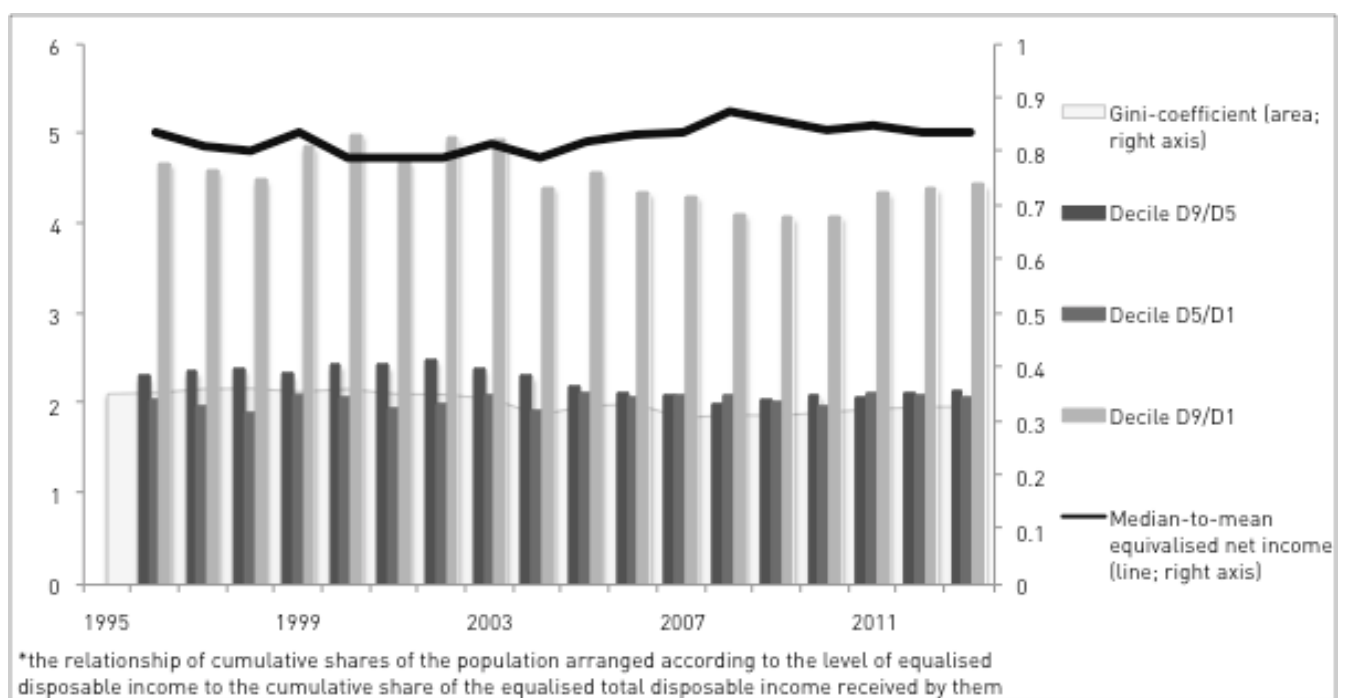
## 2. INCOME DISTRIBUTION

The following chapter will present the general dynamics in income inequality as well as in the functional income distribution and elaborate on the factors that have potential impact on its distribution in Estonia and the peculiarities of these factors in the light of the arguments presented by Dunhaupt (2013) and Stockhammer (2009).

Developments in the Estonian economy could be portrayed by seemingly conflicting tendencies, evidenced in the rapid economic growth that has been accompanied by deepening regional and social inequalities. Very rapid changes in the development process during the last two decades revealed social inequalities and marginalization of weaker members of a society as a natural co-product of market economy reforms (Lauristin 2011). By adhering to the principles of liberal market economy, which has been manifest in relatively low social expenditures, weak union movement, low minimum wages, and low de-commodification level in terms of increased private contributions into the safety nets (e.g. pensions and healthcare coverage) as well as reduced transfer payments (e.g. less emphasis on passive labor market measures), Estonia has been categorized as neo-liberal welfare state, which also explains relatively high income inequality (see Aidukaite 2011; OECD 2003). Study by Kokkota (2000) on income distribution has found that relative inequality that was established after the independence in 1991 persisted until the late 1990s. For example, in 1996, a household in the first decile needed to double its income in order to reach the next decile. By the early 2000s disparities still existed: the poorest 40 per cent of the population received 20 per cent of the total income, while the richest 20 per cent of the population acquired around 40 per cent of the total income, which indicated relatively

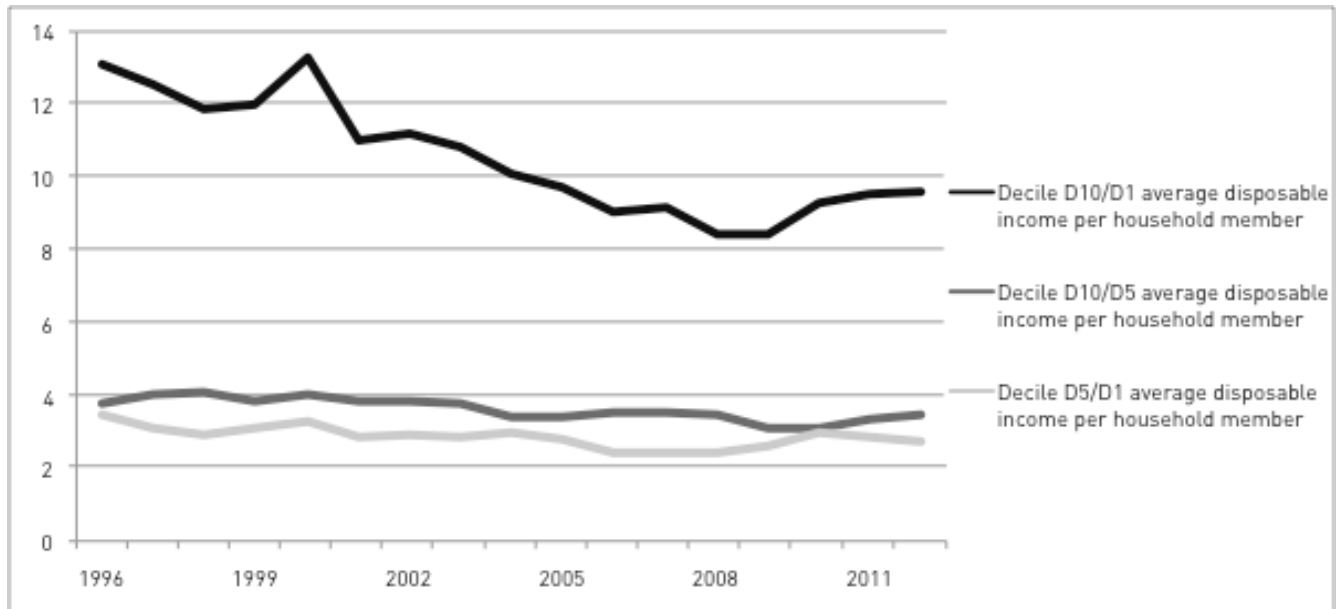
large inequality. This was supported by the average 0.356 Gini coefficient for the period of 1996–2002, but also other analytical indicators, such as Atkinson's measure, quintiles' ratios, Theil's entropy measure etc., indicated to income inequality in Estonia that was one of the worst in Europe (Paulus 2003). However, since the early 2000s, Gini coefficient has improved, reaching 0.313 in 2009 as the lowest point.

**Figure 4. Gini\* and other income distribution indicators in Estonia, 1996-2013**



Source: Eurostat 2014; Statistics Estonia 2014, authors' calculations

**Figure 5. Differences in average disposable income, by income decile of households, 1996-2012**



Source: Statistics Estonia 2014; authors' calculations

As seen from figures above, the general trend has been towards a reduction in income inequality, considering either the ratios of income deciles' top cut-off points (D9/D1, D5/D1 and D10/D5) or the ratios of average disposable income per household member within deciles, e.g. D10/D1 average disposable income ratio. The clearest drop in income gap has taken place between the highest and lowest earners, while the income between top earners and those earning close to the median wage as well as the latter group and low-wage earners has differed on average 3.6 and 2.9 times, respectively, for the period of 1996-2012. Despite the leveling tendencies, one has to bear in mind large initial disparities in incomes, which could be attributed to socio-economic turbulences at the beginning of transition process, lacking labor market institutions, massive privatization in the 1990s and accompanying changes in the economic structure and labor supply (see below).

Aside from general income inequality, one of the most burning issues in Estonia over the years has been gender inequality, as on average the difference in wages between men and women has stood around 31 per cent – the highest in Europe. One of the reasons for that

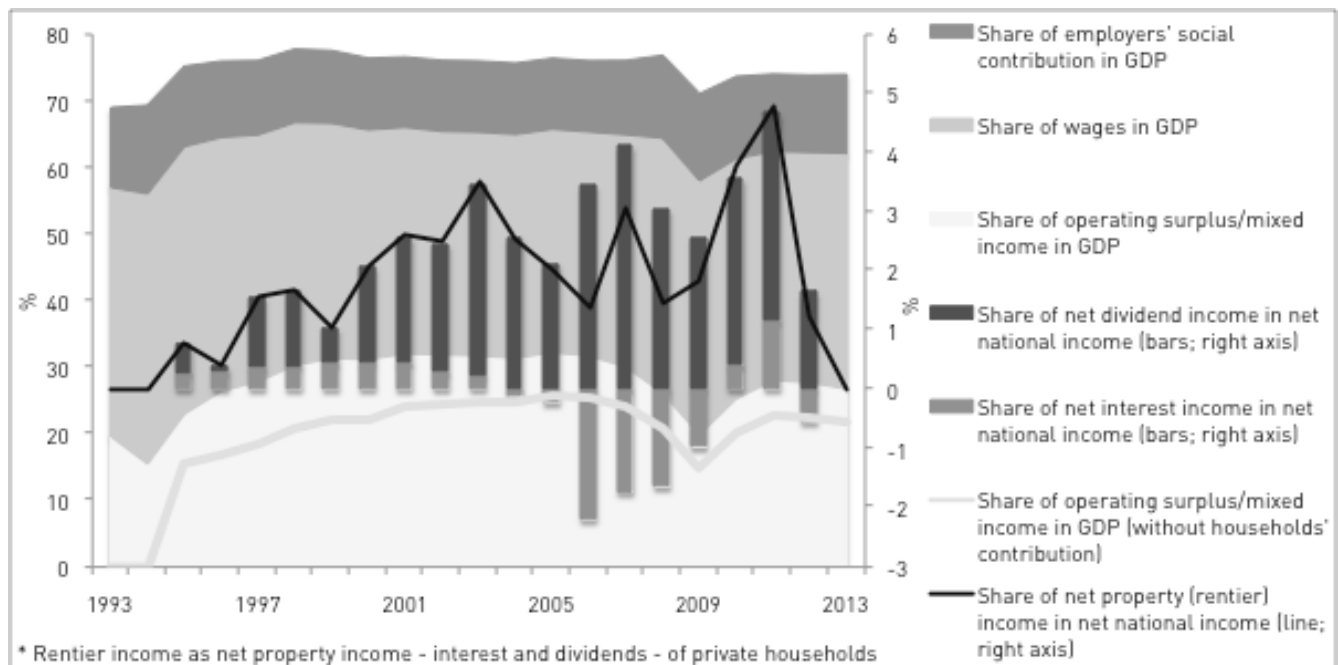
has been one of the highest levels in horizontal and vertical segregation (Anspal and Rõõm 2011; Nurmela and Karu 2009). In addition, regional disparities exist that are witnessed in health indicators, access to education, employment opportunities as well as average salaries that differed almost 1.5 times between the capital city region and the periphery (Anspal and Rõõm 2011; Käbin *et al.* 2012; Statistics Estonia 2014). Inequalities on the regional axis could be explained by the restructuring of the economy, as mono-functional areas in the periphery that had ex-Soviet narrow specialization in heavy industry did not possess similar dynamics, which existed in the regional centers. Moreover, capital city Tallinn hosted 59 per cent of all registered companies in Estonia, while 80-90 per cent of all FDI were made in the capital city by 1998 (OECD 2000b). Inequality has also been revealed within the economic sectors. Regardless of average annual rise of real wages of 7 per cent between 1996 and 2008, wages have been higher in financial intermediation, government sector, and real estate (OECD 2000b; Estonian Institute... 2010, 50).

With regard to functional income distribution, figure 6 reveals the share of total employee compensation, that is wages and employers' social contribution, and operating surplus in GDP. Even though Dunhaupt (2013, 2-3) found that labor share fluctuates with business cycles and has been in a general downward trend in both Germany and the USA, in Estonia one can see a decreasing share of wages in the 1990s and then a relative stability of wage share in total income since 2000 with no significant fluctuations within the last 20 years. Similar dynamics could be observed in the adjusted wage share, calculated according to AMECO approach, although the absolute values being even higher, compared to share of wages in GDP (see Table 1).

At the same time, rentier income share in net national income has increased from 0.8 per cent in 1995 to 4.8 percentage level in 2011, although with significant drops during the boom years of 2003-2006 that was mostly due to increased servicing of interest liabilities. Net dividend incomes have grown steadily with occasional declines in 1996, 1999, 2004-2005, 2008-2009 and 2012.



**Figure 6. Functional income distribution (without net taxes on production and consumption of fixed capital) and rentier income in Estonia, 1995-2013**



Source: Statistics Estonia 2014; OECD Statistics 2014, authors' calculations

**Table 1. Adjusted wage share in GDP, 1994-2013**

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Adjusted wage share (% of GDP at current market prices)	57	56	53	52	52	50	50	49	48	49	49	48	48	50	54	55	52	50	50	51
Adjusted wage share (% of GDP at current factor cost)	66	64	61	60	58	56	56	55	54	55	55	54	55	57	61	63	59	57	57	58

Source: AMECO 2014

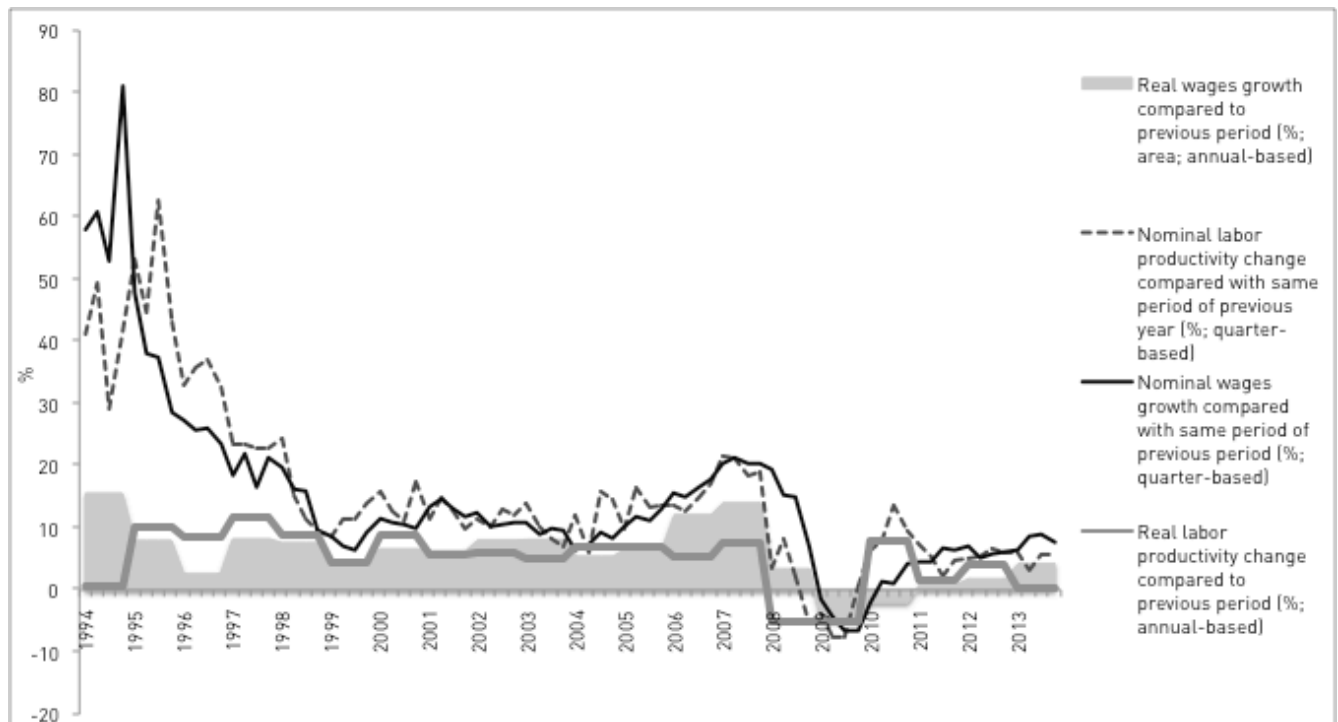
However, dynamics in the presented data should be considered with reservations. Namely, one has to bear in mind that as the labor income of the self-employed is included in the profit share, the picture gets skewed, because in Estonia the share of self-employed in the total employment is quite significant – 23.3 per cent and 31.8 per cent of all SMEs in 2005 and 2010, respectively (Kaarna *et al.* 2012, 10). If we remove the contribution of self-employed (households' operating surplus), the share of operating surplus in GDP drops on average by 7 percentage points. Nonetheless, operating surplus increased rapidly in the late 1990s before stabilizing in 2000s at the 31 per cent level and then dropping during the

2008 global crisis. Still, one of the problems with reading the corporate income figures in Estonia is that companies have the possibility to manipulate with profit figures (Trasberg 2010).

Even though the share of wages in GDP has been relatively stable after decreasing from 40.6 per cent level in 1995 to 33.6 per cent in 2002, wages *per se* have been more fluctuating. This is due to low incidence of wage indexation, as the share of firms indexing base wages to inflation has stood around 4.5 percent. Moreover, concerning the downward nominal wage rigidity, which is prevalent in Europe as firms rather freeze wages instead of cutting them, Estonia stands out as the only country where wages demonstrated substantial downward flexibility during the recent crisis: in summer 2009, around 46 percent of Estonian firms had cut wages that affected around 30 per cent of the work force, while approximately 62 per cent of companies had frozen wages (Dabušinskas and Rõõm 2011, 60-62). High frequency of wage setting or changes and modest downward nominal wage rigidity could be attributed to the relatively high share of flexible pay components in total pay at about 36 per cent on average with performance related pay of the total wage bill standing at 14 per cent level in Estonia (*ibid.*, 21-24). The most important factor that is considered in the wage adjustments has been a change in labor productivity, followed by changes in turnover and avoidance of a drop in living standards, whereas inflationary trends have not been taken into account. Wage structure that is beyond the company level has insignificant impact on the formation of labor wages due to the fact that the Estonian market is small and most of the companies have a monopsony position on the labor market. This is reflected in the finding that around 85 per cent of the companies that change wages more than 4 times annually, remunerate employees on the hourly or piecework basis. Overall, approximately 78 per cent of all companies use payment schemes that are directly or indirectly related to labor or organization productivity (Rõõm and Uusküla 2006, 29-33). Flexible remuneration schemes, often changes in wages on an annual basis, large labor mobility and intense competition among businesses have all

together enabled Estonian companies to keep growth in wages in line with productivity growth for most of the years (*ibid.*, 43).

**Figure 7. Nominal and real productivity vs. wages growth in Estonia, 1994-2013**



Source: Statistics Estonia 2014, authors' calculations

While Stockhammer (2009) and other studies (Dunhaupt 2013) on financialization's effects on functional income distribution have argued that real wage growth has lagged behind productivity growth, leading to declining share of wages in total national income, the Estonian case unveils a somewhat different picture (see Figure 7). In spite of the productivity growth surpassing wage growth for several years, wages outpaced productivity in 1994, during the booming years of 2002-03 and 2006-08, and lately in 2013 that has been considered as one of the factors behind the deteriorating international competitiveness. Productivity growth in the late 1990s was accompanied by a sharp decline in the wages share in total income, while in 2000s the share of wages stabilized and even increased at the end of the booming period. More importantly, productivity increases between 1993-2000 resulted largely from the falling employment and structural shifts in employment at the

sectoral level, while the technological content of productivity growth was low (Tiits *et al.* 2006, 56). Hence, productivity advancements and decreasing wages were more related to transitional processes rather than financialization as such.

One could argue that the increasing share of top income earners has kept the wages' share stable (Dunhaupt 2013, 4). Despite the impossibility of applying Dunhaupt's (2011) approach in determining adjusted wage share in total income in Estonia, as the similar findings are hard to detect in the Estonian case due to unavailable data on top 1 per cent wage share and its composition to be subtracted from the total wage pool, it has been found that wages of top managers of Estonian companies with 200-300 employees have been one of the lowest in Europe with average annual gross wages being around 76100 EUR (Traks 2013). At the same time, the ratio of wages of managers to minimum wages has been 10-20 times higher (tarkjapalk.ee, 2013) and top management salary slightly over 10 times higher compared to blue-collar workers (Kirsipuu and Balõnski 1998; Eri laid 2013). The main motivational measure has been higher wages, while performance-based bonuses are paid once a year to the extent of 20 per cent of base salary. Moreover, contrary to Western practices performance-based bonuses are not linked to the achievement of long-term, three to five year results (Ernits-Kaljuste 2012). Income in the form of stock options, even if counted as part of the wage income, has not been widely used practice in the Estonian corporate governance approach and hence does not skew the picture. If used, the main motivation of adopting stock options in the Estonian companies has been to keep key employees at the company, while only in case of few publicly traded limited liability companies, stock options might be used to motivate top managements to focus on quarterly results (Must and Kruusmaa 2010). It is the Estonian taxation principles that have not favored the motivation of employees with stock options (Klauson 2009). Until 2011, tax on fringe benefits was applied in case of stock options, meaning that stock options were taxed with income and social tax due to extra benefit/income given to employees by employers. The main motive of renouncement of this regulation was to support the practice

of using stock options and increase the flexibility of stock options' taxation. Since 2011, income from stock options has been seen as income from the realization of securities, not as a labor income, which has a more favorable tax treatment (Must and Kruusmaa 2010).

In these circumstances, the most common way to attach employees to companies has been reliance on dividend payments rather than labor wages that again have been subject to different taxation and which partly explains the increasing share of operating surplus as well as dividend payments in Estonia<sup>5</sup> (Kõrvel 2001; see also next chapter). Also, a survey among top 100 companies has revealed that dividend payments have been related to the life-cycle of a company in terms of dividends being paid by older companies that have surpassed the development and growth phases as well as after major investments, which explains an increase in dividends only since mid-2000s. As a rule, dividends are paid, whenever free funds are left after investments, while decisions of shareholders and taxation issues have less significant impact on the payments. Furthermore, reductions in the share capital have been used as an alternative to dividend payments. In general, conclusions on dividend payments have to be made with reservations, as the period of time of such practices in Estonia has been short (see Trumm 2005, 49-53; Teral 2011, 41).

## 2.1 Labor Unions

Heterodox economics tradition attributes decline in labor's share to neo-liberalism, financialization and decreasing workers' bargaining power (Dunhaupt 2013), although privatization that was one of the main aspects of the political economy in Estonia in the 1990s could be also seen behind a reduction in labor's share<sup>6</sup>. In addition, one has to bear in mind idiosyncratic elements, present in the Estonian transition process. For instance, 'downsizing' part of the 'downsize and distribute' approach could be seen as a result of

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<sup>5</sup> Until 1999, the main issue around dividend payments was double-taxation - corporate income tax was at 26 per cent level and in addition, distributed dividends were subject to taxation to the extent of 26/74 -, which together with the 1998 crisis hindered dividend payments (Trumm 2005, 42).

<sup>6</sup> Similar arguments have been made by Azmat *et al.* (2007) who have found that privatization has negative effects on the wage share.

technological and organizational innovations that were envisaged to reduce the overmanning, typical in socialist economies, as well as to introduce new labor-saving technologies and close inefficient enterprises (Tiits *et al.* 2006, 61).

More specifically, the bargaining power of labor is usually established by the density of trade unions, unemployment benefit replacement, and employment protection legislation, but also affected by financial deregulation in terms of giving firms more options to invest and empowering shareholders relative to workers (Dunhaupt 2013, 18; Stockhammer 2009, 14). In the Estonian case, the prevailing neo-liberal model, coupled with non-corporatist and national-conservative attitudes, has been manifest in the government's limited consultation and consensus decision-making with domestic actors in the formation of economic policies. This has allowed governments to push through considerable changes quickly. The position of labor unions in the private sector has been weak for the whole independence period. While in the early 1990s, almost all employees belonged to labor unions, the share of unionized laborers decreased throughout the next decade to 16 per cent level. In some sectors, labor unions have been lacking altogether, such as construction and banking. The most unionized are those in the public sector, Russian-speaking, and over 30 years old. One of the reasons for small influence of labor unions is their bad reputation from the Soviet period and the domination of small and micro-enterprises in Estonia (Hinnosaar 2003, 9). With regard to collective bargaining agreements, only 14 per cent of employees at the level of companies and organizations were encompassed with these agreements by 2000, mostly in public sector organizations and state-owned companies (*ibid.*, 6-7). By the late 2000s, unionization and collective bargaining coverage in the Estonian private sector were even worse at the level of 12 and 9 per cent of employees, respectively. When used, collective bargaining is predominantly at firm level and decentralized, and hence being largely irrelevant for the wage setting process in the economy (Dabušinskas and Rõõm 2011). Consequently, wage formation takes place mostly at company level with individual agreements, although in some sectors

sectoral level minimum wage agreements exist, e.g. in health care and road transport (Nurmela and Karu 2009). Similarly, employment protection legislation has been liberalized throughout the years in terms of notification procedures and compensation mechanisms (Hinnosaar 2003, 22). After implementing a labor market reform in 2009, which imposed a more flexible legislation with considerably lowered layoff costs for employers, Estonian regulation became the least strict in Europe (Dabušinskas and Rõõm 2011, 60).

On the micro-level, accompanied by the weaknesses in the labor unions, company leaders have failed noticing the development of their subordinates and their growing willingness to participate and take responsibility (Kooskora 2008, 200; Barnowe *et al.* 2003). Estonian businesses are more concerned with those values that reflect their public image to their clients and partners, and not so much the internal qualities of the company to their employees (see Järv and Korts 2002; Kooskora 2004). This also explains, why the presence of the workers' representatives on the Supervisory Board has not been required and does not happen in practice (Gerndorf *et al.* 1999). Also, Alas and Tafel (2008) found in their study that the most influential stakeholders are the customers, followed by suppliers and employees. At the same time, the influence of banks has been insignificant with only 20 per cent of respondents of their study finding banks' influence as significant, although in the 1990s, when credit institutions were under control of local owners, banks demanded their representatives to be included in the Supervisory Board as a condition of granting loans (Gerndorf *et al.* 1999).

Therefore, weak labor market policies and unions in Estonia have implied a negligible socialization of risks (Drechsler *et al.* 2006, 23; Nurmela and Karu 2009). Terk and Reid (2011) have also claimed that even protectionist lobbying and the intertwining of politics and business were relatively weak in the 1990s. Consequently, social partners, primarily labor unions and industrial associations, have played a trivial role in political processes. Given these developments, it is not surprising that minimum wage in Estonia is relatively low, compared to other CEECs. In particular, the ratio of minimum wage to average wage in

Estonia has been one of the lowest in the region, standing at the 29 per cent level in 2001 (Hinnosaar 2003, 12).

## 2.2 Privatization, Technological Change and FDI

The impact of technological change on functional income distribution, as argued by the mainstream literature (see IMF 2007 and European Commission 2007 studies), could be seen in the Estonian case in the developments of the 1990s, but not in a sense of becoming capital augmenting, but of rapid and radical restructuring of the economy that was largely FDI-driven and entailed destruction of existing productive capacities; essentially, the *primitivization* of the productive base. As noted in the introduction, catch-up process in Estonia has relied upon Fordist mass-production techno-economic paradigm (see Drechsler 2006 *et al.* 2006, 21; also Perez 2002), that is, heavy reliance on 'cheap' FDI and assembly-line production with further implications for becoming locked-in in low- and medium-technology resource-intensive sectors. Such a de-industrialization has an inclination to stagnate general income growth but also reduce efficiency in the rest of the economy due to a heavy load of destruction with a very limited countervailing creative part in the Schumpeterian sense (*ibid.*, 28; Tiits *et al.* 2006, 58). Essentially, the relocation of production to Estonia and capital accumulation financing with foreign savings has implied a reliance on a relatively cheap labor and continuous cost-squeezing for keeping foreign investors in Estonia. Consequently, given the economic specialization of the Estonian economy in international trade (see also chapter 5), where price competition has driven less competitive functions to Estonia, control over all activities within vertical intra-industry trade and profit generation has remained in the developed countries (Tiits *et al.* 2006, 57). In spite of these general tendencies, Põldis (2009) and Mällo (2007) have found in their econometric studies that even though foreign investments were attracted to Estonia by low wages, low taxes, liberal economic policies and rapid economic growth, in 2000s, the low labor-cost argument was gradually evaporated due to rapid growth in wages. On the contrary, foreign-owned companies have had higher wage level for the period of 1999-2007



that exceeded average wages in Estonia by 20-40 per cent, while local businesses had 3-9 per cent lower wages compared to average wage level. Wages in foreign-owned companies have been higher in every segment, that is, along the gender, educational, and industry categories. Differences have been explained also by the size of foreign-owned companies, their area of activity, where wages tend to be higher, but also higher productivity level. Yet, despite higher productivity and wages in foreign-owned companies in Estonia, FDI-companies have been entering the Estonian market in the relatively resource-intensive and low-tech industries within the manufacturing sector, such as food and wood processing, and textile and clothing (Tiits 2006, 109) that in the long-run do not entail possibilities for increasing returns and hence higher wages. So, given the diseconomies of scale in many industries in Estonia, a 1 per cent increase in labor costs results in a 0.26 per cent decrease in employment, which generates a strong pressure to reduce taxes and reduce minimum wage levels, as otherwise cost-based competitive advantage gets eroded (Tiits *et al.* 2006, 62).

Aside from FDI, incomes can be affected by the openness of the economy to foreign trade, as studies have found a negative correlation between trade openness and labor's share of income (see Epstein and Burke 2001; Rodrik 1997; Harrison 2002; Jayadev 2007; also Chang 2010, 143). Although the claims that competition is severe are somewhat less frequent among Estonian firms than in other Euro-area countries, the relative openness of the economy makes firms more exposed to international competition - on average, the share of exports in total sales is about a third higher in Estonia than in Euro-area or non-Euro-area countries, which makes price-taking behavior more likely (Dabušinskas and Rõõm 2011, 30). Therefore, the argument for labor market flexibility stems from the extreme openness of the economy and its sensitivity to external factors that would trigger changes in the Estonian market (Hinnosaar 2003, 3).

By elaborating on further factors affecting income inequalities and income distribution, it is not surprising that disparities in income in Estonia have been attributed to the differences

in employment and educational level (see Paulus 2003). What is interesting, income inequalities based on the educational background have diminished throughout the period of 1997-2006, which is opposite to global trends and mostly explained by the changes in the structure of the economy as well as industry that affected favorably incomes of workers with vocational training, while increasing supply of those with higher education pushed wages downwards, although the disparities have been still quite significant (Rõõm 2007). The same decreasing inequality tendencies have been observed within the occupational, sectoral, regional and ownership categories.

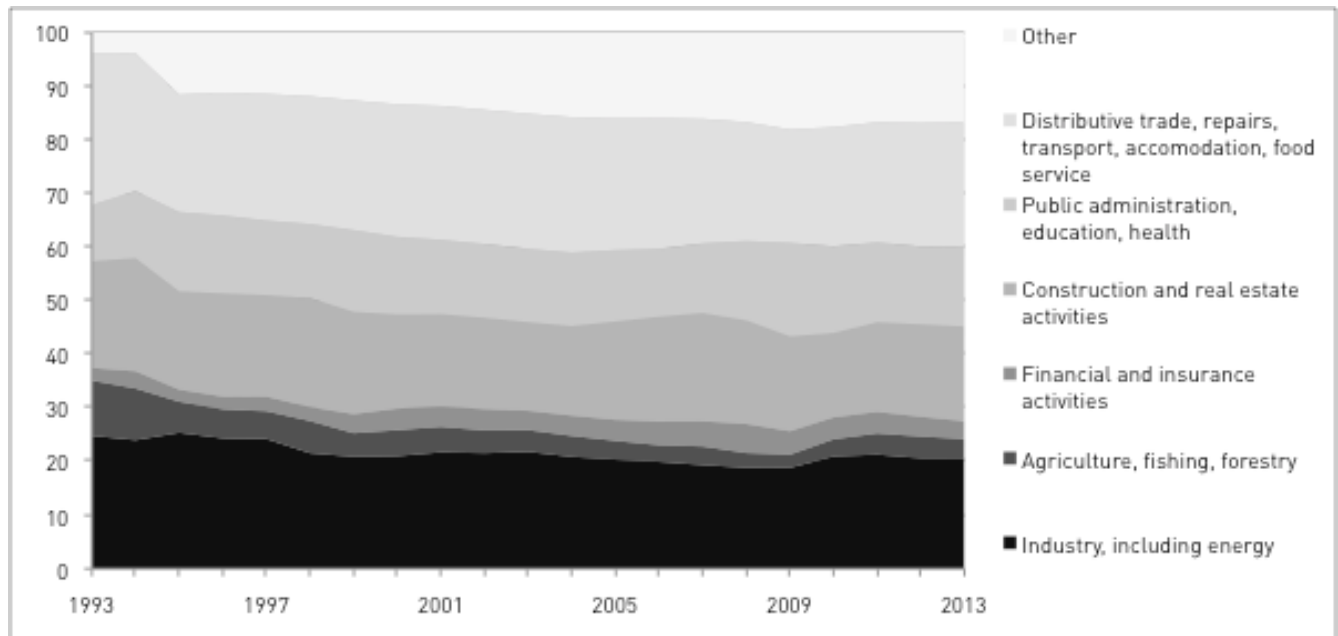
It is also noteworthy that relatively highly concentrated ownership structure in individual firms and banks with low turnover of shares has had implications for income distribution (Berglof and Bolton 2001, 87). During the privatization process, conditions were conducive for the concentration of assets into the hands of those, who were either smart or lucky enough to take advantage of opportunities in chaotic economic environment. The concentration of ownership started already with the first rounds of privatization, when apart from the control of strategic foreign investors (in medium and large companies), small companies in services, catering and commerce were first acquired by employees, but then taken over by the managers. Importance of corporate control of local companies is revealed in the fact that external common equity from existing shareholders or target capital providers is preferred to bonds or other forms of incorporation of external investors, including bank loans, and hence the reluctance to share profits (Raudsepp *et al.* 2003, 61-67; Kaarna *et al.* 2012, 52). With a relatively poor protection of minority shareholders, the concentration of ownership has increased: only 2 per cent of public limited companies had more than 50 shareholders in mid-2000s (see Kõomägi and Sander 2006, 22-54; Zirnask 2008; Raudsepp *et al.* 2003, 60; Gerndorf *et al.* 1999). Research by Pajuste and Olsson (2001) showed that ownership concentration in Estonia has been among the highest in Europe with the largest owner in Estonia having a stake of over 60 per cent and the second

largest more than 20 per cent on average (see also Postma and Hermes 2002; Olsson *et al.* 2005).

Similar to ownership concentration, one should take into account also industry-level (im)perfect competition and market concentration with its implications for income distribution. If one considers that functional income distribution is determined by the average mark-up, that is, the degree of monopoly and the sectoral composition of the economy (see Dunhaupt 2013, 10, 13; Lavoie 2009), high concentration in some industrial sectors due to small size of the market and services sector's high share in total value added could explain the increasing share of profits. However, as noted, exposed sectors' price-taking behavior due to extreme openness of the economy and fastening real wages growth that occasionally exceeded productivity growth in 2000s, did not enable businesses to pass wage increases on to increased prices but rather reduced profits, which gradually decreased as a share of GDP from 2001 to 2009, with the exception of 2005.

In service sector the share of wages in value added is relatively low, comprising 50.7 per cent in 1995 and decreasing to 37.8 per cent in 2004 and 40.2 per cent in 2013, while the share of operating surplus in value added increased from 27.9 per cent to 39.9 per cent and 32.4 per cent level for the same years. Increasing operating surplus in 2000s could be also attributed to a booming real estate market with a lot of speculative element in it, whereas the contribution of financial sector in total economy has been rather stable and relatively modest with a short-lived increase of 50 per cent from 3.6 to 5.4 per cent level in its share in total value added between 2003 and 2008. In principle, it is the services sector that has upheld a relatively large share of operating surplus in GDP in Estonia.

**Figure 8. Share of economic activity in value added in Estonia, 1993-2013**



Source: Statistics Estonia 2014; authors' calculations

On a final note, shareholder value orientation with the skewed functional income distribution towards rentier income could be observed in Estonia in the active promotion of start-up and spin-off businesses on the political level, but also in public debates in the media, that has resulted in the highest number of start-ups per head in Estonia among European countries. This in turn would explain the high share of equity holdings in the asset portfolio of households<sup>7</sup>. The business model adopted has been comprised of establishing start-ups with the support of start-up grants (e.g. EU funds), business angels' support, or own savings; then expanding for the commercialization of products on the market, and eventually exiting the investment by selling the company to (foreign) investors.

### 2.3 Fiscal and Monetary Policies

<sup>7</sup> When compared to the situation in Germany (13.6 per cent in 2009) and the USA (49 per cent in 2007) in terms of the household stock holdings (see Dunhaupt 2011, 8), stock ownership in household assets' portfolio appears to be of rather significant importance, although again, reservations need to be made in terms of stock ownership concentration among small number of individual persons (6.8 per cent of the population as of January 2014).

As already noted, incomes have been also affected by the fiscal policies, mostly through different taxation of capital and labor. Contrary to other EU countries, Estonia has opted for a flat tax system, based on the principle of proportional and uniform tax rates. The argument behind such an approach with a low tax base was an aim to support capital accumulation against the condition of low incomes (Raju 2004; Vörk and Kaarna 2010). The tax reform in 1994 introduced a flat 26 per cent<sup>8</sup> tax level for both personal and corporate income tax, while from 2000 undistributed profits from the corporate income tax have been exempted. Flat income tax rate, introduced in 1994 instead of three tax rates on personal income, has decreased from 26 per cent level in 1994 to 21 per cent by 2009. Hence, due to the regressive character of flat taxes, larger portion of income is taken from those with lower incomes. In addition, the amount of basic exemption deductible from the income of a resident natural person is relatively low (144 Euros per month) and social tax with unemployment insurance premiums one of the highest in Europe (Ruusalu 2014). In general, consumption and labor taxes have a dominating share in tax incomes with 50.8 per cent and 41.3 per cent, respectively, while the corporate income tax level has been one of the lowest in Europe - the average implicit tax rate of 5.8 per cent in 2000-2007 and the share of taxes on capital gains in tax incomes 7.9 per cent. Overall, tax income on capital as a share of GDP stood at 0.6 per cent level in 2007. One of the aims of the Estonian taxation policies has been to support entrepreneurship and reduce consumption. At the same time, no attention has been paid to either vertical or horizontal fairness of the taxes. Moreover, during the crisis years of 2008-2009, increases in value added tax and excise taxes hit the poorest segments of the population (Vörk and Kaarna 2010).

With regard to social transfers to households, Estonia tends to be an outlier once again. Given that family-oriented subsidies accounted for 1.3-1.7 per cent of GDP between 1998-2007 and reached 2.2 per cent level in 2009, the problematic aspect is inequality in social

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<sup>8</sup> Currently, personal income tax has a 21 per cent flat rate. VAT is 20 per cent as a standard, but there is no capital gains tax on institutions, while individuals are taxed at a flat rate of 21 per cent.

transfers<sup>9</sup>, in particular with regard to maternity leave benefits that have increased throughout the years since the implementation in early 2000s. Social benefit payments have been linked to previous income levels, which have resulted in the allocation of larger share of social benefits to high-wage earners, while existing income distribution among receivers of subsidies has been maintained (Võrk and Karu 2009). While child allowances within the highest and lowest income quintile were equal in 2000, the gap increased to 1.8 times in favor of the high income earners (Võrk and Karu 2009, 4).

Finally, flexible labor market has been a precondition for the operation of currency board arrangement (Hinnosaar 2003, 3). In Estonia, suppression of wages has been affected by the monetary regime, that is, currency board arrangement that has implied a reliance on internal devaluation in times of crisis as an adjustment mechanism and approach to improve international competitiveness position. In light of these developments, Estonian governments have adhered to mainstream arguments by relying on the reduction of benefits and taxation as well as improving the flexibility of the labor market. Also, against the widening current account deficit in Estonia (see chapter 5), European Central Bank has recommended that Estonia should curb growth in wages and loans (Tiits *et al.* 2006, 51).

To sum up, income inequality in Estonia was one of the worst in Europe in the 1990s and the problem is still present today, although with the focus on more narrow topics, such as gender and regional inequality. Yet, given such large income disparities at the initial starting point in the early and mid-1990s, income inequality has decreased throughout the years, partly due to changes in the labor market and the structure of the economy. At the same time, the share of wages in functional income distribution fell significantly in the 1990s, but then stabilized in the 2000s. One of the reasons behind the initial high income inequality and declining wage share was massive privatization that targeted strategic investors, which explains high ownership concentration in Estonia. In addition, the

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<sup>9</sup> In 2003-2007, almost 95 per cent of family support measures consisted of pecuniary payments, and only 5 per cent of public services.

deteriorating employees' share has been affected very weak labor unions, increasing flexibility in labor market legislation, and basically non-existent collective bargaining system in the private sector, but also by the reliance on cost-squeezing FDI in low- and medium-technology sectors, implying cost-based competitive advantage in the economy's international specialization. Due to small size of the Estonian market, increasing market concentration as well as the monopsony position of the Estonian businesses has maintained uneven income distribution. Finally, incomes have been affected by fiscal policies, mostly through different taxation of capital and labor. Namely, undistributed profits from the corporate income tax have been exempted in Estonia, while the regressive character of flat income tax rate has taken a larger portion of income from those with lower incomes. Concerning other macro-economic policies, suppression of wages was further affected by the monetary regime, that is, currency board arrangement that has implied a reliance on internal devaluation as an adjustment mechanism to improve international competitiveness. Therefore, the overall decline in wages' share and persistent social inequalities have been more related to transitional processes in terms of the introduction of market economy institutions, undertaking market reforms with the restructuring of the economy, and the elimination of the overmanning, typical to socialist system of production. Similarly, decisions on dividend payments have been driven by rather other motives than financialization. As seen, dividend payments increased only in 2000s, which has been explained with the life-cycle approach – businesses paying out dividends after maturing and surpassing the development and growth phases. Also, dividend and interest payments have fluctuated according to the business cycles in Estonia with an increasing trend of dividend and interest payments during the 1996-97 and 2005-07 economic boom periods. At the same time, it is noteworthy that Estonian businesses have more and more practiced the remuneration of top management with dividends, instead of wages or stock options, due to increasing taxation level of labor compared to capital gains. By and large, one cannot observe the shareholder value orientation in the financialization sense, as stock options have not been used, institutional investors play an insignificant role in the local market and

were only established in early 2000s, and there are only few public limited companies that are listed on the stock market.

### 3. CAPITAL STOCK INVESTMENTS

Before turning to the analysis of patterns in capital stock investments and their financing in Estonia, it is necessary to acknowledge the context and peculiarities of the Estonian development, when trying to apply the approaches and categories of previous studies on the issue, as there are several reservations to be made. Research approach to Anglo-American type of corporate governance that focuses on stock ownership issues, is not exactly applicable and adequate in a situation where the ownership structure has been in rapid transition and where ownership concentration as well as increases in foreign ownership have been in progress, while market institutions and the whole business environment do not operate the way as in the advanced market economies, or began to operate in this way only lately (Tafel *et al.* 2006). As far as one particular context or its scale is concerned, for instance, the US capital market cannot be compared to the Estonian one. Furthermore, as already stated, financialization in Estonia was revealed in a particular way in terms of heavy reliance on foreign capital. Hence, when conceived of as the deregulation of the financial sector and the proliferation of new financial instruments (see country reports within work package 4), the rise of financial investment and incomes but also increase in the transfer of earnings from non-financial corporations to financial markets in the form of interest payments and dividend payments, the increase in household indebtedness, the emergence of institutional investors in the financial markets, shareholder value orientation and changes in corporate governance (see Onaran *et al.* 2011, 637; Orhangazi 2008; Stockhammer 2004), several of these phenomena have either only recently emerged or even non-present (significant). Even if detectable, the motives and reasons behind these manifestations of financialization have been different, compared to the ones in advanced market economies. For instance, the shift from managerial capitalist strategy to money manager capitalist structures is not such a straightforward task to



detect in the Estonian case due to different starting position in the 1990s in terms of challenges in addressing the issues of Soviet heritage and instituting market economy institutions. To some extent, downsize and distribute approach was consciously taken and integral part of the privatization waves in the 1990s as part of the transition process that was affected by overall economic turbulences at that time. This was reflected in the squeezing of labor costs for attracting foreign investors and destruction of existing productive capital for getting rid of the Soviet-time production complexes, which incurred distribution of assets and massive sales (essentially stripping the capital base). Findings in a study by Kooskora (2008) have revealed that during the period of 'cowboy capitalism' or 'shark capitalism' in the 1990s, the main business purpose was to earn fast profit and thus attain success by focusing on short-term interests – thinking no more than 1-3 years ahead. At that time, practically nobody paid attention to the environment, society or the considerations of stakeholders other than owners. CEOs had considerable power and they concentrated on short-term profitability indicators (see also Kalmi 2003; Kalmi *et al.* 1999). The lack of experience and knowledge of business and management in the early years meant that entrepreneurial spirit, innovativeness, and the ability to find loopholes in legislation or ways how to get around the laws and regulations were most valued (Kalmi 2003; Kooskora 2004, 2005; Virovere *et al.* 2002). From 2000, however, attention turned to long-term perspectives, planning periods became a minimum of five years, and ten or even more years were common with the priority given to the enterprise's ability to stay in the market, resisting the competitors' pressure and meeting the customers' demands. The success has been seen in the export potential and sustainability of the organization. This indicates the stability in general economic institutional environment, which enabled the corporations to operate in a more balanced manner (Kooskora 2008, 205). In addition, given that most of the top-managers and prominent owners have become public figures and hence closely observed by the media, their views have also changed, as one cannot just 'look at making a profit as a very primitive action. It's a far-reaching process and it reflects how you have looked after one stakeholder group or another. It's a logical circle where you

cannot just take one component out' (*ibid.*, 208).

**Table 2. Business drivers, interests, and perceived stakeholders in Estonia, 1995-2004**

<b>Business development stage determinants</b>	<b>'Cowboy' or 'Shark' capitalism period, 1995-1999</b>	<b>Period of political and socio-economic stability, 2000-2004</b>
<i>Main business drivers</i>	Economic success, willingness to accomplish something, big risks and opportunities	Decreased risks and opportunities, gaining partners' trust, customers' expectations
<i>Business interests and main activities</i>	Short-term interests, restructuring old Soviet style enterprises, starting from zero	Long-term investments, strategic planning and benchmarking
<i>Organization's position in society</i>	Earning profits, finding loopholes in legislation, lack of attention to society or environment	Socially oriented activities, image and reputational concerns
<i>Perceived stakeholders</i>	Owners, shareholders, banks, boards, customers	Public, media, customers
<i>Illustration</i>	"It is not appropriate to ask about the origin of the first million"	"Good and wise business people do not neglect laws"

Source: Kooskora 2008, 211.

Similarly, it is found in the literature that the embeddedness of 'shareholder value' approach and the overall pressures for increasing dividend payout ratios by non-financial companies have been related with the emergence of institutional investors (Orhangazi 2008; Crotty 2002, 23). In the Estonian case, however, institutional investors, such as investment funds, insurance and pensions funds have played an insignificant role and moreover, have been investing their assets abroad<sup>10</sup>, not to mention their late emergence in

<sup>10</sup> The share of the foreign assets of investment and pension funds has steadily grown reaching 83 per cent of total assets by the end of 2011, where investments in shares and fund units make up 67 per cent of the total assets of investment and pension funds (Bank of Estonia 2012). The second pillar (mandatory) pension funds invested even higher proportion of assets into the most liquid foreign markets already by the end of 2004 (FSA 2014). While pensions funds have been more conservative in their investment strategies, equity funds have directed investments into emerging market equities or units of other equity funds. Thus, the relevance of

early 2000s. Furthermore, the role of foreign institutional investors has been modest, as there have been only around 15 listed companies on an annual base, whose stocks have been publicly traded, while most of the prospective companies were privatized (sold) to foreign investors in the 1990s. Thus, international institutional investors have had indirect impact on the Estonian companies (affiliates) through their parent companies. Also, hostile take-overs with junk bonds or stock options in the pay structure of managers, associated with the 'shareholder revolution' (see Lazonick and O'Sullivan 2000; Stockhammer 2004), have not been characteristic features of the Estonian business landscape. Moreover, since the arguments around the shareholder value and changes in the corporate governance refer to listed companies, that is, large corporations (see Stockhammer 2004, 728-29), Estonia is again an outlier in terms of having only few public limited companies that are listed on the stock market.<sup>11</sup> The typical contextual factors in Estonia include the domination of small enterprises, 'core owners', and active involvement of foreign investors (Alas *et al.* 2010, 39; Juhkam 2000). What is peculiar to Estonian businesses, is that the majority of firms are owner controlled and managed due to prevalence of small- (micro) and medium-sized companies (SMEs<sup>12</sup>) - after the dismantling of centralized production facilities of the Soviet period, companies with up to 100 workers made up almost 95 per cent of registered enterprises in 1998, which indicates different financing patterns and problems of most Estonian firms, compared to conventional corporations (see Raudsepp *et*

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investment funds for the Estonian economy has been mainly from the saving perspective, not as a source of funding for businesses.

<sup>11</sup> Boyer (2000) has elaborated on 'finance-led accumulation regime', whereby a redistribution from labor to shareholders gives rise to stock market boom and in turn, fuels the consumption. In Estonia, such a situation occurred in late 1990s during the short-lived stock market boom in 1996-97 that resulted in eventual crash, affected by the Russian and Asian crises. A strong correction of the Tallinn Stock Exchange in 1997 was unavoidable punishment for the speculative pushing up of share prices, which, however, had a weak impact on the economy, since its role in the financing of Estonian real economy had been too small to cause a greater setback (Gerndorf *et al.* 1999).

<sup>12</sup> In 1996, approx. 28,500 SMEs were operating actively, employing 74 per cent of the labor force, exporting 72 per cent of total Estonian export value, and investing 60 per cent of total investments in fixed assets (Kinks 2000). Same figures could be observed in 2010 - employing 79 per cent of the labor force, exporting 76 per cent total export value, and investing 79 per cent of total investments in fixed assets. In 2010, 99.9 per cent of all business enterprises were SMEs (Kaarna *et al.* 2012, 22).

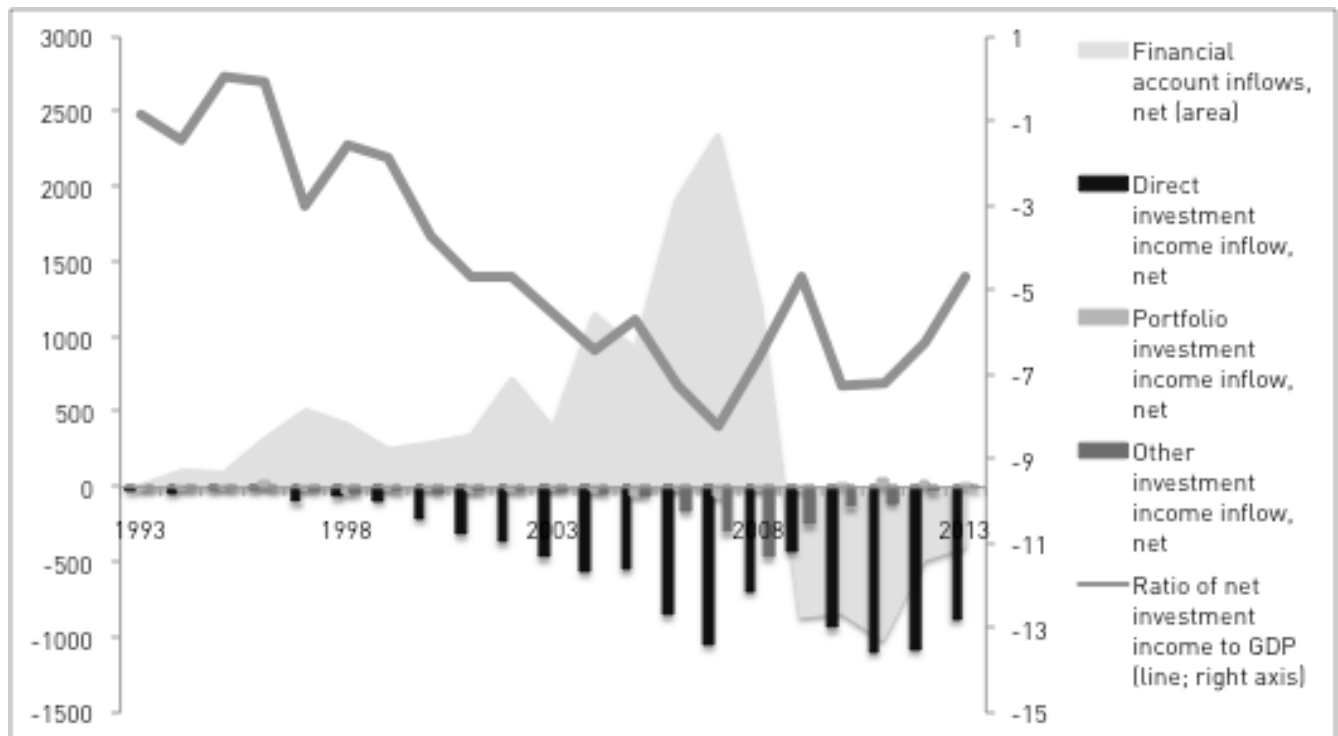
*al.* 2003, 58-59; Hansapank 2004). In these businesses, owners' direct impact on the organization's activities is significant, as the line between the owner and the top manager has been quite vague. This is also reflected in the Estonian owners having reserved greater freedom to interfere in the activities of the top managers – owners trying to act as co-managers, not as owners governing their agents<sup>13</sup>. Moreover, the contemporary professional managers emerged in the Estonian business organizations approximately in 2000 or slightly earlier (Kooskora 2008, 203; Alas *et al.* 2010, 30-35; Hannula 2006, 81). Therefore, the manager-shareholder dichotomy from the financialization perspective has not been on the agenda from the domestic capital's point of view due to different organizational structure of businesses and corporate governance patterns. On the other hand, substantial presence of FDI-companies and the majority foreign control in the securities market capitalization<sup>14</sup> has implications for corporate governance along the strategies of foreign (Nordic) owners, as capital transfers have been accompanied by changes in corporate strategies and management culture (Juhkam 2000). And here, financialization effects could be seen in the dynamics of the primary income balance of the current account, although the speculative element, related to portfolio investment incomes has not been significant (see Figure 9).

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<sup>13</sup> The inseparability of owners and managers was established in early 1990s, when many co-operatives from the Soviet period were transformed to joint stock companies and large number of completely new ventures was created as joint stock companies (at the beginning of 1995 the number of joint stock companies that were registered in Estonia was about 48000, while the total number of all enterprises was around 57000 at this time). More importantly, managing directors in many new joint stock companies were among larger shareholders and simultaneously in the role of the Chairman of the Board. After 1995 legislative amendments, including the raise in the minimum founding share capital of public limited companies, other legal forms of entrepreneurship gained more popularity (by 2008 there were 5526 public limited and 89348 private limited companies) (Gerndorf *et al.* 1999; Wahl 2009).

<sup>14</sup> By the turn of the millennium, 46 per cent of the securities market capitalization was controlled by Swedish and Finnish companies. Only 20 per cent of the stock market capitalization belonged to resident investors in 2004, while the share of residents among bond investors reached 92 per cent. However, the share of resident investors in the bond market capitalization has decreased since 2003, standing at 69 per cent in 2009, while in case of stock market, the share of local investors has slowly increased, reaching 48 per cent by 2009 (Bank of Estonia 2005b; Bank of Estonia 2010b).

**Figure 9. Primary income flows in the current account balance and financial account flows in Estonia, 1993-2013**



Source: Bank of Estonia 2014, authors' calculations

### 3.1 General Patterns in CEECs

Before turning to the Estonian case, some general patterns could be observed in the whole CEE region. The EBRD transition report (2006, 47) has concluded that despite some regional variation, bank loans have played a limited role in enterprise financing. When compared to Western economies with average 180 per cent level, the average level of domestic credit to the private sector in post-socialist countries has been around 38 per cent of GDP (Lane 2007). There are several reasons for meager financial intermediation, reflected in the relatively low level of domestic credit supply for financing productive investments in CEECs by Western standards (see Steinherr 1997). First of all, enterprises in CEECs have relied mostly on internal funds<sup>15</sup> for financing both fixed investment and

<sup>15</sup> Debt-asset ratio for non-financial firms was 44 per cent in the Czech Republic in 1994, 32 per cent in Hungary and 41 per cent in Poland in 1992, while being around 65 per cent in advanced economies (Keuschnigg 1997).

working capital, while external long-term finance coming from FDI that has accounted for a significant portion of corporate finance (see IMF 2000; EBRD 1995, 1998; Schoors 2002; Czako and Vajda 1993; Bonin and Wachtel 2003; Wagner and Iakova 2001; De Castello Branco *et al.* 1996; Alfred *et al.* 2012; Szikszai *et al.* 2012). Aside from FDI inflows, another peculiarity of CEECs has been reliance on cross-border loans from parent companies, foreign capital markets, and non-resident banks that have been a substitute for domestic bank credit in CEECs since the mid-1990s and explain the relatively slow growth in domestic credit to corporate sector<sup>16</sup> (see Feldman and Wagner 2002; Ichnat and Prochazka 2002; Lepik and Törs 2002; Watson 2003; Barisitz 2008; Myant and Drahokopil 2011; Hanley *et al.* 2002). Firms have also used short-term liabilities to non-banking institutions and inter-enterprise credit due to hardening of external budget constraints (Scholtens 2000; Calvo and Coricelli 1992; Petrick 2002; Alfred *et al.* 2012; Szikszai *et al.* 2012), although banks have provided some working capital for the corporate sector, but had a limited role in financing investments<sup>17</sup> (Berglof and Bolton 2001; IBRD 1996; see Table 3). Hence, employee owners have been considered as functional equivalent to a banking system in CEECs (see Crouch *et al.* 2005, 375).

**Table 3. Enterprises' financing of investments, 2009**

	Estonia	Slovenia	Poland	Hungary	Czech Republic
Percentage of firms not needing a loan	47.7	38.7	48.9	59.2	47.7
Percentage of firms using banks to finance investments	41.5	52.2	40.7	48.7	33.4
Proportion of investments financed by bank loans (%)	22.8	37	23	32.3	16.2
Proportion of investments financed internally (%)	64.4	55.9	58.3	58.2	69.5

Source: Enterprise Surveys 2014

In the 1990s, lending to local enterprises required expertise on client relationships and the

<sup>16</sup> In addition, the EU funds and government co-spending on EU-financed investments have provided the Baltic States one of the leeways to contribute to, and in some occasions substitute the role of private funds in financing productive investments in Estonia and other Baltic States (see Kattel and Raudla 2013).

<sup>17</sup> Borrowing from banks to finance working capital accounted for around 10 per cent of total financing in CEECs, while bank loans for financing fixed investment stood around 14 per cent in 2006 (EBRD 2006). For external financing, SMEs have used also the services of leasing companies (Alfred *et al.* 2012).

ability to evaluate unique situations, both of which lacked in market dominating foreign-owned banks (see Bonin *et al.* 2008). Also, high failure rates and poor information on SMEs increased collateral requirements and hence foreclosed possibilities for bank lending (Bonin and Wachtel 2003; Wagner and Iakova 2001). Moreover, given the macroeconomic volatility, delays in the implementation of creditor rights, insufficient credit history of enterprises, and inadequate accounting standards, banks were cautious in issuing long-term loans (Barisitz 2005; De Castello Branco *et al.* 1996; Takla 1994). On the demand side, enterprises were discouraged from applying for loans due to foreign banks' collateral conditions, high real interest rates, and cumbersome lending procedures, implying a negative impact of foreign ownership of the banking sector on loan application behavior, which also provides support for "cherry-pick" behavior by foreign banks in host countries (see Brown *et al.* 2012; EBRD 1998; Bedranski and Osinski 2002; Molnár 2010). This situation improved at the turn of the millennium, when credit registers and government financial supports as well as guarantees were introduced that facilitated the growth of SME lending (Barisitz 2005).

### 3.2 Investment Financing in Estonia

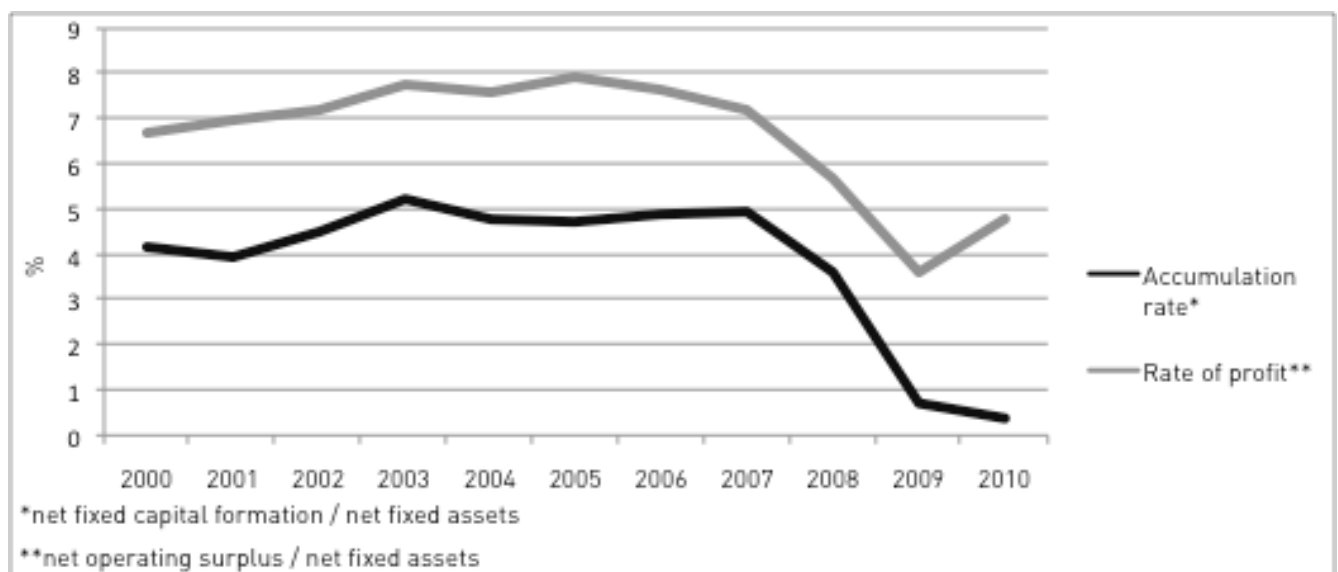
In the rest of the section, analysis of the accumulation and financialization dynamics in Estonia is presented by providing statistical evidence and the findings of supportive (econometric) studies already undertaken, similar to Dumenil and Levy (2003) and Corbett and Jenkinson (1997). By looking at the dynamics in the 1990s, it could be seen that at the beginning of the transition process, Estonia was faced with the Schumpeterian creative destruction process but without the creative part<sup>18</sup>, which implied a modest demand for banking credit. And given that businesses found a niche in commerce, services etc., but not so much in production (Raudsepp *et al.* 2003, 69), investments that were made, were mostly

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<sup>18</sup> As already mentioned, any efficiency gains in non-financial sector in the early 1990s were achieved by reallocation and reorganization of productive assets, and not so much with investments in fixed assets. During the early transition period there was little correlation between investment and production dynamics (Mickiewicz *et al.* 2006, 80).

covered with own funds. To a great extent, such a financing profile persisted in the subsequent transformation of the economy towards labor-intensive economic activities in the lower end of the international value chains with the focus on cutting costs, while flat learning curves did not provide enough possibilities for private investments into R&D (see Tiits 2006, 124-125; Kattel 2010, 50-51; Tiits *et al.* 2008). At the same time, investments into fixed assets were necessitated by the low capitalization of the economy and were supported by gradual integration into the EU, macro-economic stabilization and institutional as well as structural changes in the economy (Kangur *et al.* 1999, 21).

**Figure 10. Accumulation rate and rate of profit in non-financial corporations in Estonia, 2000-2010**



Source: Statistics Estonia 2014; OECD Statistics, authors' calculations

As Estonian businesses gained improved access to foreign capital, accompanied by a high level of FDI inflows in the 1990s (Randveer 2000, 13; Pikkani and Randveer 1999), these foreign inflows increased the ability to finance investments from internal funds due to accumulation of profits. Between 1994-1998, Estonian businesses reinvested profits in the amount of 1.6 billion EUR, which accounted for 49 per cent of all funds used for capital investments (Kangur *et al.* 1999). In principle, the most preferred source of financing of Estonian enterprises has been internal equity capital, while the use of external funds,



primarily in the form of bank loans, has occurred in the cases of a dire necessity, when internal funds are insufficient, or when cheap funds have been obtained from banks<sup>19</sup> or from intra-group foreign parent companies (see Kõomägi and Sander 2006, Sander and Kõomägi 2007; 22-54; Zirnask 2008). Based on the surveys among entrepreneurs, preference has been also given to internal funds, followed by bank loans, external common equity from existing shareholders, external common equity from target capital providers<sup>20</sup>, and finally debt in the form of bonds (Raudsepp *et al.* 2003, 61-67). For instance, between 1996 and 1999, the average leverage ratio of Estonian non-financial corporations stood at 1.12 level, one of the lowest in CEECs, and although the share of long-term liabilities was also one of the lowest in international comparison, almost half of short-term liabilities were inter-enterprise overdue (Randveer 2000, 4-5). More importantly, while the share of debt financing was relatively stable in Estonia until 1998, since then it has fallen considerably (see Masso *et al.* 2011, 16-17). This finding is remarkable, given that firms had improved access to credit, revealed in high growth in aggregate credit supply, falling interest rates and heavy competition between commercial banks (see Brixiova *et al.* 2009). Yet, the net financial position of enterprises has become more negative over time. This is partly due to increasing reliance on bank financing that was used for real estate purchases before 2008 crisis, while in the post-crisis period, bank loans have been used for financing current assets (Juks 2004, 17; Bank of Estonia 2010a). All in all, the most significant contributions into the structure of financial liabilities have been made by the shares and

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<sup>19</sup> The main reasons for meager demand for bank loans has been lacking collateral, high interest rates, and mostly no need for bank loans (Kaarna *et al.* 2012, 51).

<sup>20</sup> The fact that external common equity from existing shareholders or target capital providers is preferred to bonds reveals the importance of corporate control among local companies (Raudsepp *et al.* 2003, 61-67). This explains why Estonian corporate landscape is characterized by a concentrated circle of shareholders and raising capital from external equity has not been considered, while the role of the stock market has not been an option because of the small size of the majority of Estonian companies. In addition, the privatization approach restricted the purchases of shares of enterprises on the market and resulted in highly concentrated ownership structures of Estonian enterprises (see Alas and Tafel 2008, 297). Another reason for an insignificant reliance on external equity has been related to weak investor protection that also explains the underdeveloped venture capital market in Estonia (see Kõomägi and Sander 2006, 22-54; Zirnask 2008; Raudsepp *et al.* 2003, 60).

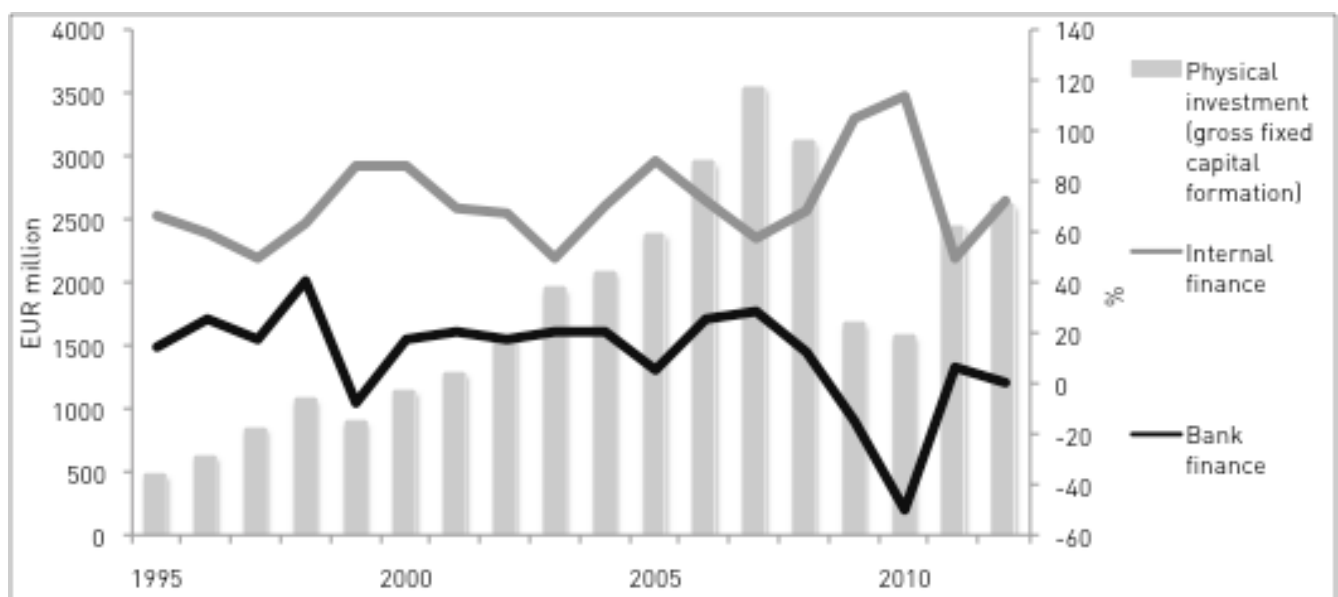
other equity category that saw a gross growth from 2.3 billion EUR in 1995 to 25.3 billion EUR in 2008, and loans that increased from 0.8 billion EUR in 1995 to 17.5 billion in 2008 (OECD Statistics 2014).

**Table 4. Net sources of finance in Estonia, 1995-2012 (percentages)**

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>Internal</b> ( <i>net savings + consumption of fixed capital</i> )	65.6	58.5	50.2	63.1	85.4	85.9	68.9	66.9	49.6	69.5	87.5	71.4	56.5	67.3	104.2	113.7	50.6	71
<b>Bank (loan) financing</b> ( <i>loan liabilities - loan assets - currency and deposits</i> )	14.4	25.4	17.6	40.5	-7.5	17.8	20.2	17.7	20.3	20.9	5.3	25.5	28.5	13.0	-14.0	-50.1	7.1	0.
<b>Bonds</b> ( <i>net securities other than shares, except financial derivatives</i> )	-0.2	3.9	12.5	-15.2	5.0	1.7	2.1	15.3	0.2	1.0	4.3	0.8	4.2	-5.9	0.1	2.2	5.0	4.
<b>New equity</b> ( <i>net shares and other equity, except mutual funds shares</i> )	27.6	13.6	29.0	6.3	10.0	4.4	9.4	6.2	21.6	3.4	4.2	-1.2	2.5	4.6	-20.5	19.7	5.6	0.
<b>Trade credit</b>	0.7	-4.1	3.0	9.8	-1.2	-7.8	6.0	-2.6	4.9	3.4	-0.8	2.2	2.6	8.8	16.3	-6.8	18.8	15
<b>Capital transfers</b>	3.0	1.9	2.5	3.3	2.7	1.3	0.9	1.8	1.8	5.4	2.6	4.2	3.7	7.1	17.3	14.0	6.2	8.
<b>Other</b>	-11.1	0.9	-14.8	-7.9	5.6	-3.3	-7.4	-5.3	1.6	-3.5	-3.1	-2.8	1.9	5.1	-3.4	7.1	6.8	-1

Source: OECD Statistics 2014, authors' calculations

**Figure 11. The financing of Estonian investments, 1995-2012**



Source: OECD Statistics 2014

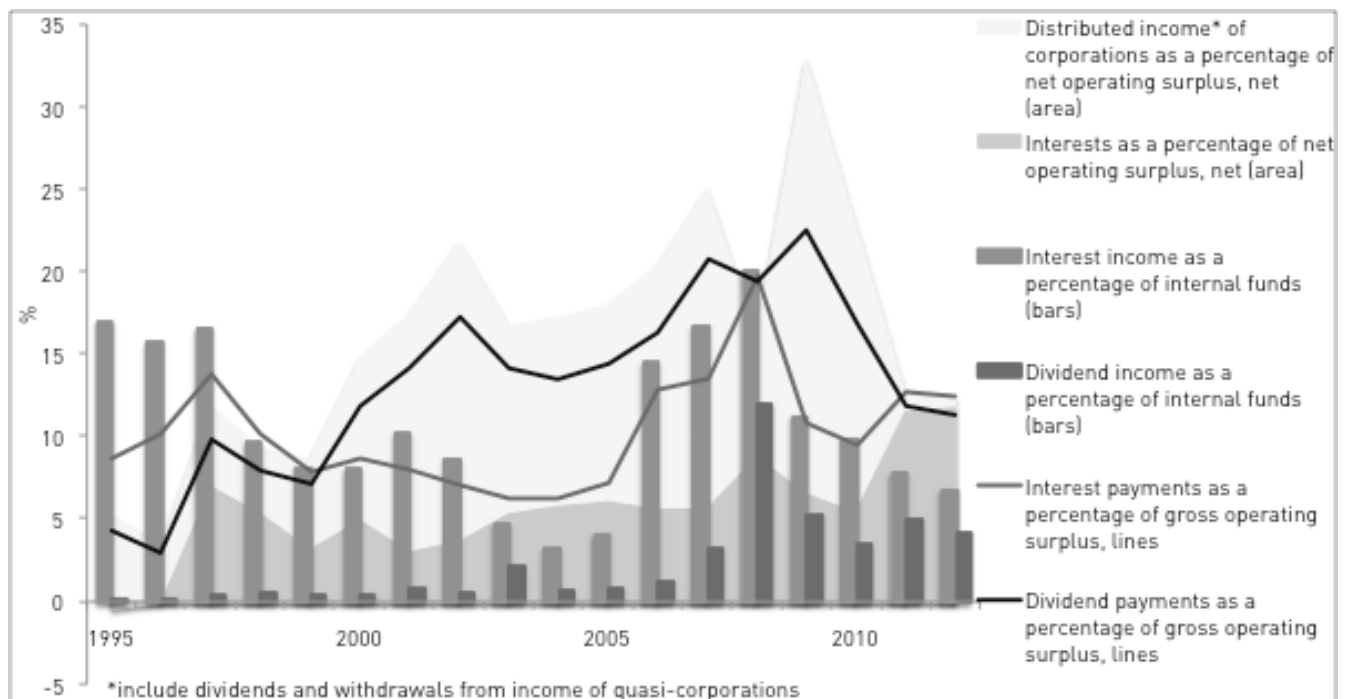
The figure 11 above indicates a clear negative correlation between internal finance and bank lending with the contribution of internal funds increasing during the low investment period, whereas low investment is being linked with low use of external finance. These

findings have been supported by the study by Corbett and Jenkins (1997).

Reliance on internal equity that has consisted mainly of the savings of an owner, family members and relatives as a preferred funding source has been supported by the fact that the dividend payout ratio, i.e. the proportion of net income paid out as dividends, has been relatively low - around 10 per cent in mid-1990s (Raudsepp *et al.* 2003, 61-67). Although the declared distributed profits that include dividends have increased throughout the years from 139.5 million EUR in 2000 to 1204.7 million EUR in 2009, the ratio of income from corporate income tax to GDP has been below the EU average, staying below the 2 per cent level of GDP since 2000 (Lasn and Kaarna 2010). Such an increase could be partially explained by the fact that majority of businesses, where the ownership and management are non-separable, tend to remunerate top management with dividends and not wages due to higher taxation level of labor compared to dividends, which has been revealed in the decreased social insurance and individuals' income tax payments. In addition, payments for the provision of services to employers have been used instead of salaried labor (Kaarna *et al.* 2010; Sander *et al.* 2010). Dynamics of interest and dividend income and payments could be seen from figures 12 and 13 that reveal modest growth in dividend and interest payments until the 2007-08 global crisis, while no clear trends in interest income and only recent sharp increase in dividend income from 2008 in non-financial corporate sector. Nonetheless, the share of dividends and interests in internal funds and net operating surplus is relatively low below 20 per cent level and also in relation to gross saving. Further, one could also observe the fluctuations in these indicators according to the business cycles in Estonia with an increasing trend of dividend and interest payments, but also interest income during the 1996-97 and 2005-07 economic boom periods, and drop in the figures during the post-boom economic recessions. Higher interest income compared to dividend income reveals the tendency of non-financial corporate sector to deposit excess retained earnings at commercial banks. This is supported by the depositing trends of non-financial corporate sector – an increase of 413 per cent from 2000 to 2010 or from the level

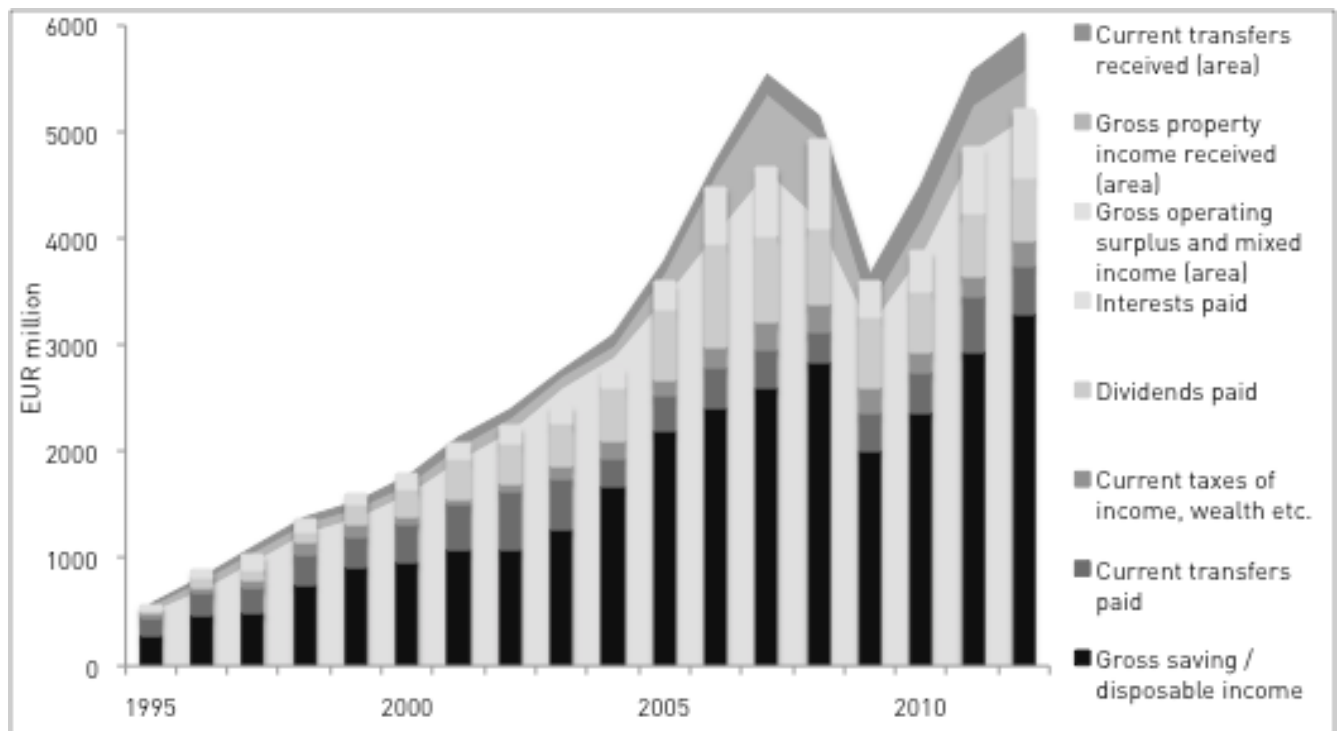
of 11.3 per cent of GDP to 24.8 per cent of GDP (Bank of Estonia 2014; author's calculations). This could be interpreted as a sign of financialization, although growing deposits also reflect improved financial literacy and banking products/services that provide an alternative vehicle for storing the accumulated savings/buffers. Furthermore, such an increased liquidity of non-financial corporations could be seen as a response to reforms in fiscal policies in early 2000s.

**Figure 12. Dividends and interests of non-financial corporations in Estonia, 1995-2012**



Source: Statistics Estonia 2014; authors' calculations

**Figure 13. Allocation of primary income account of non-financial corporations in Estonia, 1995-2012**



Source: OECD Statistics 2014; Statistics Estonia 2014

Given the peculiarities of the Estonian corporate income tax system, attention should be paid to the effects of taxation policies in understanding the financing patterns in Estonia (see also Rajan and Zingales 1995 on the tax issues). The corporate income tax reform in 2000 that lowered the income tax on reinvested profits to zero<sup>21</sup> supported further the reliance on internal funds (see Sander 2003). Concerning other effects of the tax reform, businesses have observed a positive impact on the increase of reinvested profits, in particular, in case of small businesses, while its impact on dividend payouts, primarily for private consumption purposes, has been rather insignificant (Kuusk and Jürgenson 2010; Kaarna *et al.* 2010). Hazak (2009), on the other hand, has found from an empirical analysis

<sup>21</sup> Estonia applies a relatively high flat tax rate on corporate income – 21 per cent on distributed corporate profits - but has a narrow tax base. Namely, a peculiar feature of the Estonian corporate income tax system is the provision of list of profit usages that are subject to taxation, not the whole amount of operating profit. However, as the list of such usages is non-exhaustive, there are possibilities for tax avoidance, which in turn, distorts the profit and rentier income figures (Raju 2004).

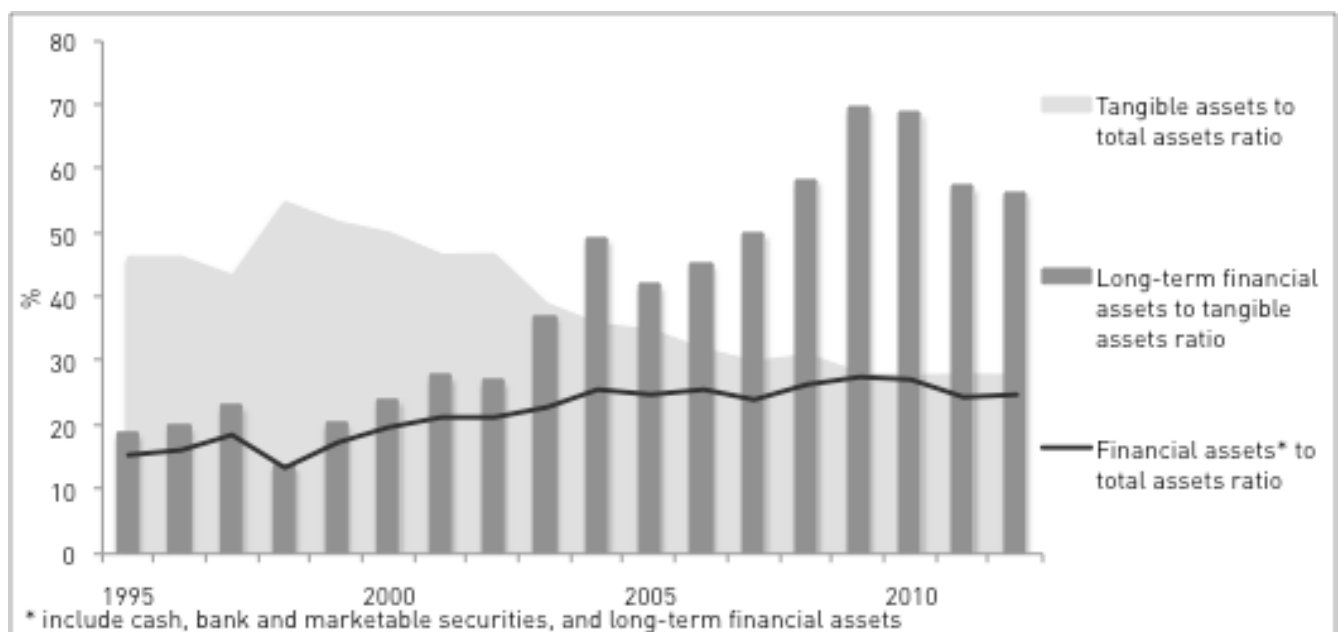
of Estonian firm-level data that the tax reform decreased dividend payouts and also the utilization of external financing (loans), but increased the share of retained earnings in total assets and liquid assets as cash and equivalents, implying that firms still needed to direct their undistributed profits to investments (Hazak 2009; Masso *et al.* 2011). More specifically, as an effect of the tax reform for the period of 2000-2003, the share of liabilities in total assets fell in Estonia after the income tax reform by an average of 7 percentage points, the share of loans fell by an average of 7.6 percentage points, liquidity, or liquid assets to total assets, increased by an average of 2-3 percentage points, and the share of retained earnings and reserves grew by 11 percentage points (Masso *et al.* 2011, 17; see Figure 15). Masso *et al.* (2011) have also found that the tax reform had a statistically significant effect on investment growth<sup>22</sup> and investment rate that were 0.37 and 0.203 percentage points, respectively, higher for the period of 2000-2003, compared to pre-reform period, with the effect being stronger in services and smaller firms. Overall, there has been a stronger effect on small firms' liabilities to assets and cash to assets ratios, given the evidence from previous studies that the small firms in Estonia were subject to financing constraints (see Mickiewicz *et al.* 2006). Firms have at least to some extent accumulated their retained earnings in the form of liquid assets instead of investing them in productive assets. Clear shifts in the capital structure in favor of equity financing have also been detected. While these trends may have lowered efficiency, the possible positive side is that the changes induced by the income tax reform may have helped Estonian companies to cope with the recent economic crisis of 2007/08 (Masso *et al.* 2011, 23). On the other hand, it has been found that accumulated retained earnings were also directed into high prolific projects that turned to be out risky in the end. In particular, exemption of profits from taxation led to excess capitalization and investments into the real estate

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<sup>22</sup> In the banking sector, the corporate tax regime has stimulated the consistent re-investment of profits, which has led to excess capital in banks. Due to modest dividend payments boom-driven earnings have increased the capital cushions, while parent banks have supported their subsidiaries by setting relatively low dividend payout ratios. As of 2011, all the biggest foreign-owned credit institutions in Estonia have abstained from paying out dividends after the full acquisition (De Haas and Naaborg 2006, 177-178; Männasoo 2003, 35-36; OECD 2011, 24).

sector, financed by bank loans that turned sour against the 2007/08 events (Kaarna *et al.* 2010). Furthermore, the introduction of corporate tax reform has been found to aggravate the reallocation of capital into more productive uses (OECD 2009, 151; Kuusk and Jürgenson 2010). This could be also seen in the investment dynamics into tangible and financial assets, as the surpluses have been less used to build productive capacities. It is evident that despite the increased investments into the fixed capital formation (see Figures 10 and 11), the rate of growth of investments into financial assets has outpaced the investments into tangible assets (see Figure 14).

**Figure 14. The share of financial assets of non-financial corporations in Estonia, 1995-2012**



Source: Statistics Estonia 2014; authors' calculations

Even though some tendencies of increasing financial investments and rentier income as well as increased payments to financial markets could be observed, one should approach with some reservations when drawing conclusions on the effects of these financialization manifestations on crowding out real investment and capital accumulation through decreasing available internal funds and shareholder value orientation (see Onaran *et al.*

2011, 639; Orhangazi 2008; also Lazonick and O'Sullivan 2000; van Treeck 2008). As already stated, income tax reform has played a significant role in directing investment and financing dynamics, but also other socio-economic peculiarities have had an impact, as presented at the beginning of the chapter, one of them being the dominance of SMEs in the Estonian economy. Therefore, given a relatively large and positive contribution of gross fixed capital formation to GDP growth throughout the years, except for 1999 and 2008-2010 (see Figure 2), and the prevalence of non-listed SMEs, whose investment rate and growth increased in the post-reform period, this would question the negative effect of increased financial investments on real investments (see Orhangazi 2008).

Even after the 2008 crisis, the availability of internal resources, i.e. increased deposits and excess capacities (utilization of production capacities amounted to 67 per cent in 2010, compared to its peak of 80 per cent in 2006) thwarted credit demand from the non-financial sector, although slower growth in profits and the need to finance investments as well as current expenses with savings decreased internal funds as buffers (Bank of Estonia 2009b). The demand for external funds, i.e. bank credit, has been subdued due to a smaller need for real estate investments, which have been relying to a great extent on external financing. Before the 2008 events, increases in debt commitments and a relative decrease in own funds resulted in the debt-to-equity ratio of non-financial companies rising to 61 per cent by 2006 and 110 per cent by 2008, while at the same time, the coverage of corporate loan and bond commitments by liquid financial assets decreased (see Bank of Estonia 2007b; Bank of Estonia 2008; also Bank of Estonia 2010a, 4-12; Estonian Institute... 2010, 13; Bank of Estonia 2011a, 4; also Figures 15 and 16). Nonetheless, credit growth to the corporate sector in 2000s has lagged behind loans issued to households, which again indicates the fact that a significant share of investments by the non-financial sector has been financed by retained earnings, and in case of multi-national enterprises (MNE) by intra-company loans as well as foreign capital<sup>23</sup>, including credits from oversea banks (see Festić 2012, 190-192;

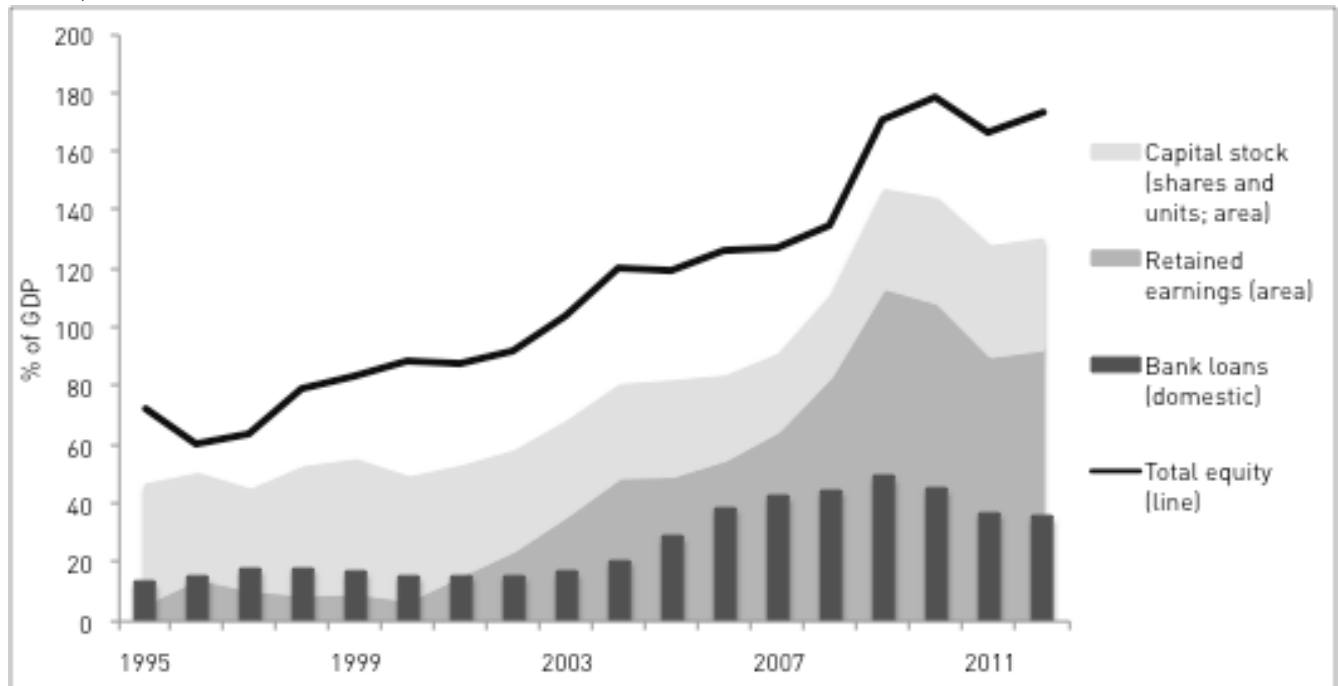
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<sup>23</sup> The capability of enterprises to borrow foreign funds without the intermediation of domestic banks, both



Berglof and Bolton 2001, 77-87; Bank of Estonia 2010b).

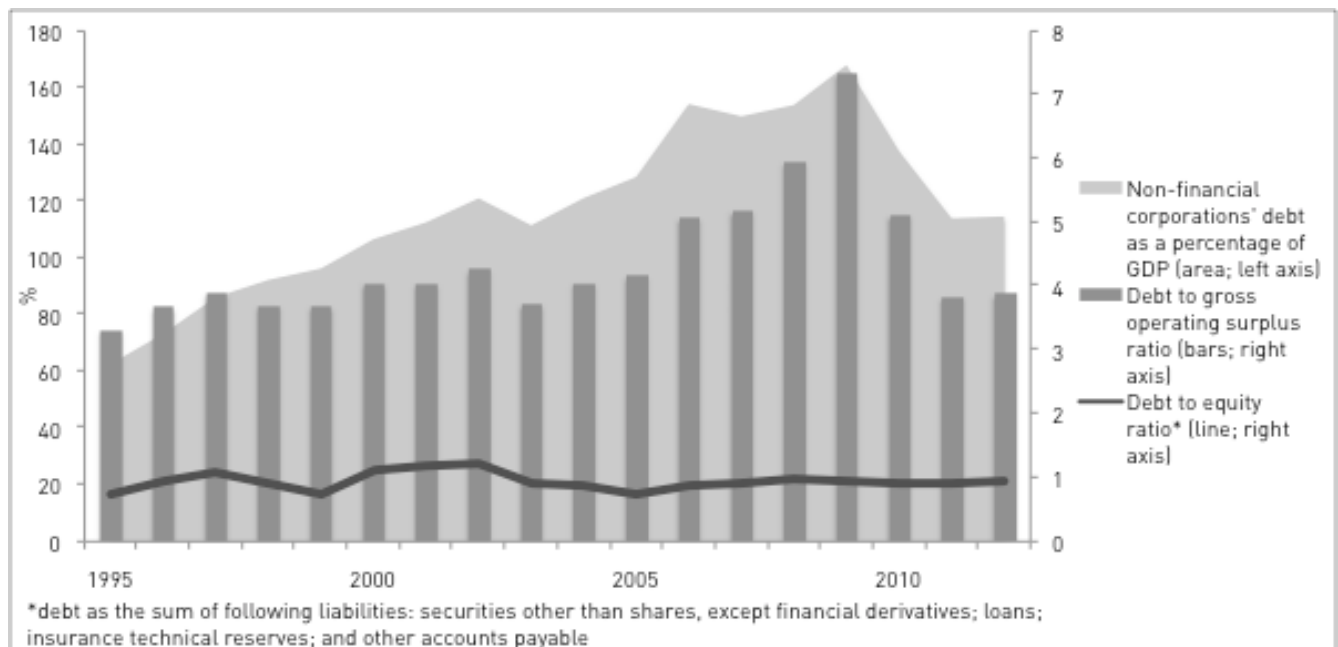
**Figure 15. Bank loans to non-financial corporations, retained earnings, share capital and units, 1995-2012**



Source: Statistics Estonia 2014; Bank of Estonia 2014

from mother companies and other foreign investors, has been enhanced by the accumulating FDI stock. In 2000, the share of foreign financing in the structure of debt-creating financing of the non-financial sector was approximately 50 per cent and without intra-company loans (i.e. FDI flows), it was 25 per cent (Bank of Estonia 2001; Festić 2012).

**Figure 16. Indebtedness indicators of non-financial corporate sector in Estonia, 1995-2012**



Source: OECD Statistics 2014

As seen from figure 16 above, debt sustainability has been deteriorating up until 2009, if one considers trends in the debt to GDP, and in particular, to gross operating surplus ratio that captures developments in the leverage of the non-financial corporations sector and indicates a worsening in balance sheet conditions with increasing risks for non-financial corporations in servicing liabilities out of surpluses.

Concerning the banking loans that have been the second largest source of financing of non-financial corporate sector, some reservations need to be made. De Haas and Naaborg (2006) have found that the loan portfolios of local banks tended to be focused on large corporate customers, and in the 1990s, only some enterprises were considered creditworthy and were granted long-term loans. Since the mid-1990s, however, banks' credit was gradually channeled into export-oriented companies as well as SMEs (Bank of Estonia 1997). Nevertheless, according to the findings by Koivu (2002), even foreign-owned credit institutions saw relatively large risks in SME financing and thus established tighter

relationships with large enterprises. The position of banks changed during the 2000s, when the market for corporate finance got saturated and the competition increased from both internal and external sources. Aside from competition argument, the improvement of subsidiaries' lending technologies led banks to gradually expand into the SME and retail markets (De Haas and Naaborg 2006). The reason for such transition lies in the increased competition in the market for large corporate customers with eroding interest-rate margins as well as fees, while the ability to efficiently screen and monitor smaller firms gradually improved. Also, legal and accounting practices became more sophisticated, which improved the ability of banks to base lending decisions on cash-flow analysis, backed up with collateral, and thus, rendered SME lending less risky (*ibid.*, 169-173). Furthermore, one cannot underestimate the impact of the EU structural funds<sup>24</sup> and other transfers as the source of income for non-financial sector throughout the years (Bank of Estonia 2005a; see also Table 4 'capital transfers') that has been taken into consideration in banks credit policy by offering loans for co-financing to the companies that have been granted funds from state budget (see Hansapank 2005; Hansapank 2007). The growing volume of the EU structural funds<sup>25</sup> has induced the demand for bridge financing and loans for required self-financed contribution of the subsidized investment projects. The credit volume, related to structural subsidies was approximately 2.2 per cent of the corporate loan stock in 2005 (see Bank of Estonia 2006b; Šimek 2010, 34-35). The main issue with bank lending, however, has

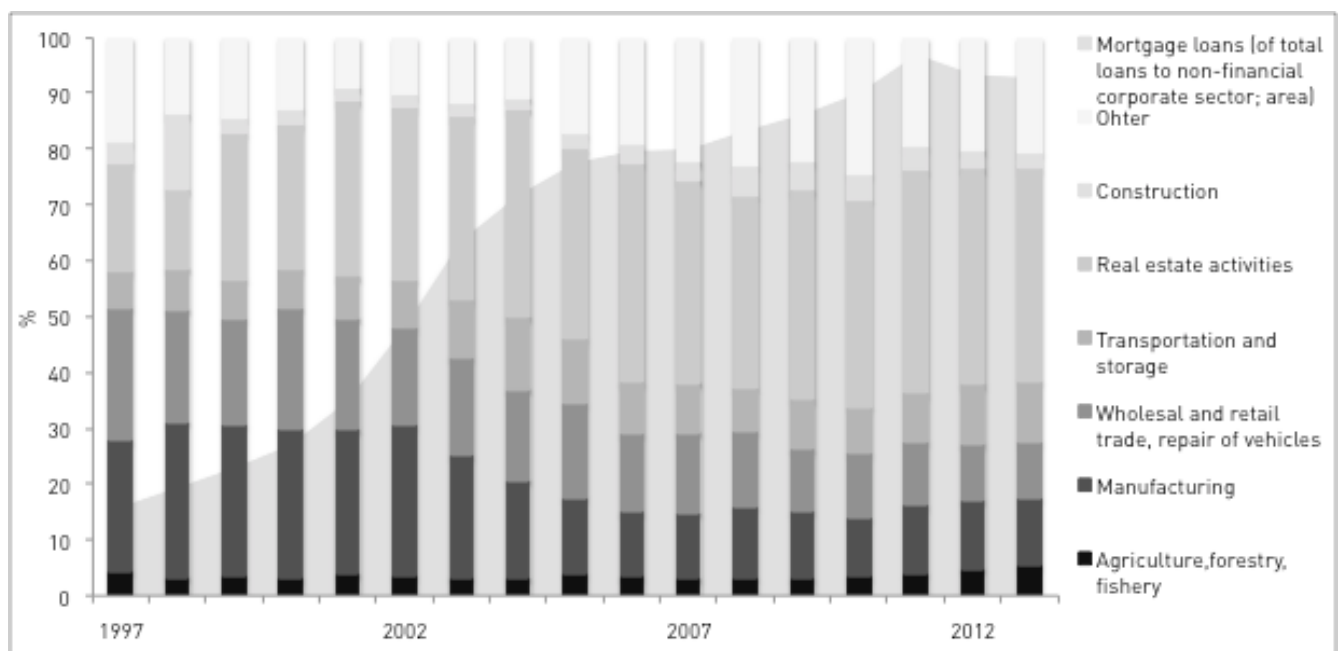
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<sup>24</sup> A research on start-up grants by Lukason and Masso (2010) indicates that 682 firms got financial support from Enterprise Estonia during 2004-2006 due to lack of equity and financing possibilities brought out as one of the reasons. These grants have been differentiated between small and large size firms to support exporting activities and the acquisition of fixed assets. Access to EU finance (structural funds) has become an alternative source of funding for SMEs in different economic sectors with the focus on high-tech start-ups and R&D capable businesses (see e.g. Madureira *et al.* 2007, 36-37). Yet, the priority in allocating public grants and also loans has been given to start-ups or growing enterprises that are export-oriented and are engaged in prioritized technology fields, produce higher value added products, and thus, pay higher than average salaries (Traks 2012).

<sup>25</sup> The Baltic States have been among the leaders in absorbing the EU funds and directing these to new domestic start-ups and social policy measures that reintegrate people into workforce, which indicates to the purpose of bank loans for co-financing the EU-funded projects. Utilization of banks as intermediary bodies is perceived to accelerate EU funds absorption, in particular in channeling funds to SMEs, but their role in absorbing EU funds has included the project assessment, fund disbursement, monitoring, and on-site inspections (see Bohle and Greskovits 2012; The European Bank Coordination Initiative 2011).

been related to the priority given to the banks' home-country customers, as the inflow of foreign capital to Estonian non-financial sector was one of the reasons for Scandinavian banking groups to enter Estonian market. For instance, Sampo Bank and SEB have actively supported the clients from their Nordic home countries, which has resulted in a bias in their corporate credit portfolio towards Nordic customers (De Haas and Naaborg 2006, 174).

**Figure 17. Loans to non-financial corporations by main economic activity in Estonia, 1997-2012**



Source: Bank of Estonia 2014

Further to bank lending, only in 2004 the price of credit in Estonia equaled the Western European countries, which opened up possibilities for more expensive capital-intensive investments (Hansapank 2005). Nonetheless, increasingly higher share of credit was directed to real estate business during the boom years from early 2000s (see Figure 17), while over half of the loans were taken for a purpose of purchasing real estate. By establishing either subsidiaries in or partnerships with real estate sector's entities, real estate and construction companies have become the most borrowing-oriented sectors

since the early 2000s. For instance, the stock of real estate credit by local banks to both households and businesses increased from the level of 6 per cent of GDP in 1997 to 63.7 per cent of GDP in 2009 (Bank of Estonia 2014).

In the corporate loan portfolio, the share of loans granted to commercial real estate companies has been the largest, accounting for almost 40 per cent in the banks' loan portfolio at the peak of the boom in 2006. That year investments increased 22 per cent on y-o-y basis, reaching 34 per cent of GDP, where the biggest contribution was made by construction and real estate sector (Bank of Estonia 2007a; Grigoriev and Abigalov 2011, 25-28).

Aside from domestic bank loans and leasing, the development of real estate and construction sectors has been supplemented by FDI. It is noteworthy that unlike other Central European countries, Estonia has attracted most of the FDI inflows into non-tradable sectors, including real estate business (Festić 2012, 193; Tiits 2007, 8-16). After 2008, corporate lending shrunk the most in the real estate and construction sectors (Bank of Estonia 2010a, 4). At the same time, commercial real estate and construction sectors had the most overdue loans both in terms of share and amount (Bank of Estonia 2009b). Consequently, in 2000s, real estate and construction markets have been one of the most dynamic, but also increasingly indebted sectors in the Estonian economy that eventually led to the overheating of the economy and crisis in 2008-2009. So, aside from the size issue and the ownership structure in terms of domestic or foreign ownership that has had implication for funding sources, although these two tend to be connected in the Estonian case, the sources of funds vary also among industries.

All in all, two categories of non-financial companies has emerged in Estonia: 1) large, but also medium-sized foreign owned companies, which tend to be the leaders in their industries with the advantage of availability of cheaper foreign credit and know-how, and 2) local capital based small and micro enterprises that rely on both internal funds and loans

from domestic banks (Kangur *et al.* 1999, 17-20; Terk and Reid 2011; Mickiewicz *et al.* 2006, 78; Kaarna *et al.* 2012, 15-16). The most financially sound companies are large firms that have outperformed SMEs and micro-enterprises in nearly all profitability indicators (ROE, ROA, ROI). The reasons for that are their economies of scale from expanded production and reliance on export sales, while the business results of micro enterprises, operating mainly in the sheltered sector, depend on the volatile domestic demand (see Bank of Estonia 2004a; Vahter 2005, 9-10; Golebiowski 2007, 26; Männik *et al.* 2006, 283; Varblane and Ziatick 1999). While domestic enterprises have relied on decreasing costs and reducing number of employees, coupled with meager investments into new technologies, foreign subsidiaries have been more capital-intensive as well as export-oriented, and possessed higher investment capabilities due to the availability of funding. In the Estonian context, it is noteworthy that companies, which were privatized to foreign owners were demonstrating better results than locally owned businesses in terms of turnover per employee, export sales, profitability, and creditworthiness (see Varblane and Reiljan 1999; Purju and Teder 1998; and Terk and Pihlak 1997).

In sum, the financing of capital investments in the Estonian businesses has mostly relied on internal funds and when needed, on bank loans, as typical to bank-based financial system. Reliance on own funds has been supported by the relatively low dividend and interest payments that have been associated with fiscal policies, namely, the corporate income tax reform in 2000 that lowered the income tax on reinvested profits to zero. Still, the preference for internal funds accounts for the high ownership concentration and hence the reluctance to share the profits. Mediocre financial intermediation, on the other hand, has been explained by the banking crises in the 1990s and the restructuring of the economy that has entailed creative destruction without the creative part and the increasing share of service sector in the economy. Therefore, even if observable, downsize and distribute part of the financialization process was an integral part of the privatization waves in the 1990s and associated with the dismantling of the Soviet heritage as part of the transition process.

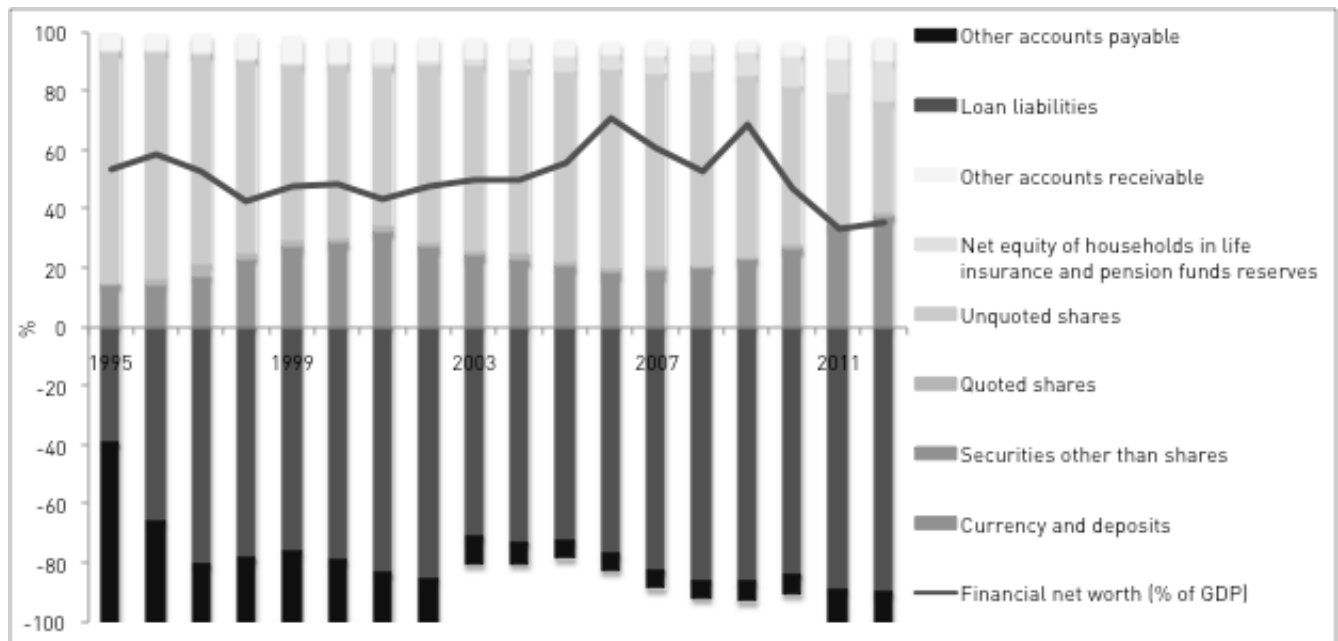
During that period of 'cowboy capitalism', the way to achieve success was to focus on short-term interests and the main business purpose was earning fast profit, while 2000s, on the other hand, witness the movement away from such short-termism. Given these circumstances in the early years, accompanied by macroeconomic volatility, insufficient credit history of enterprises, and inadequate accounting standards, bank lending was discouraged for long time. Moreover, related to increasing presence of foreign-owned companies, banks were biased in their credit policies towards foreign affiliates. Banking financing to non-financial corporate sector got an impetus in the second half of 2000s with an increasing absorption of the EU structural funds and other transfers as the source of income for non-financial sector. This has been taken into consideration in banks' credit policies by offering loans for co-financing to the companies that have been granted funds from state budget.

Thus, if any tendencies at all, one can notice increasing accumulated retained earnings (savings) of non-financial corporate sector until the 2008 crisis. This in turn has spurred increased investments into financial assets as the sign of 'real' financialization, even though the fixed capital accumulation rate turned into a sharp decline only since 2007, when the crisis hit. Nonetheless, several phenomena of the financialization, such as the rise of financial investment or increase in the transfer of earnings from non-financial corporations to financial markets in the form of interest payments and dividend payments, but also the emergence of institutional investors in the financial markets, have been either only recent occurrence or still non-present/insignificant. Similarly, the pre-requisites for shareholder value orientation in the Estonian business landscape, such as robust stock market, institutional investors etc., are hardly present. And even if detectable, the motives and reasons behind these manifestations of financialization have been rather different, compared to the ones in advanced market economies (e.g. increasing investments into financial assets incentivized by the fiscal policies, meager capital investment possibilities due to small market, and 'primitive' productive structure of industries).

#### 4. HOUSEHOLD CONSUMPTION

As covered in the Chapter 1, private consumption has been the main contributor to the GDP growth throughout the years. At the same time, the net incurrence of financial liabilities outpaced the acquisition of financial assets from late 1990s, even though the net financial balance of the households has been positive; only from 2005, the net financial position of households started to deteriorate due to the decreasing value of the shares and other equity, and the considerably stronger growth of households' financial liabilities compared to financial assets, where loans have comprised between 80 and 90 per cent of the financial liabilities of the Estonian households since 2007 (Bank of Estonia 2009b; Bank of Estonia 2010b; see Figure 18).

**Figure 18. Financial balance of household sector in Estonia, 1995-2012**



Source: OECD Statistics 2014; authors' calculations

Surprisingly, it is not demand or time deposits that comprise the largest share of households' assets, but shares and other equity, mostly unquoted shares<sup>26</sup>, although as stated, these have been highly concentrated due to majority ownership control in the

<sup>26</sup> In Estonia, these holdings of unquoted shares are less liquid and more difficult for households to value.



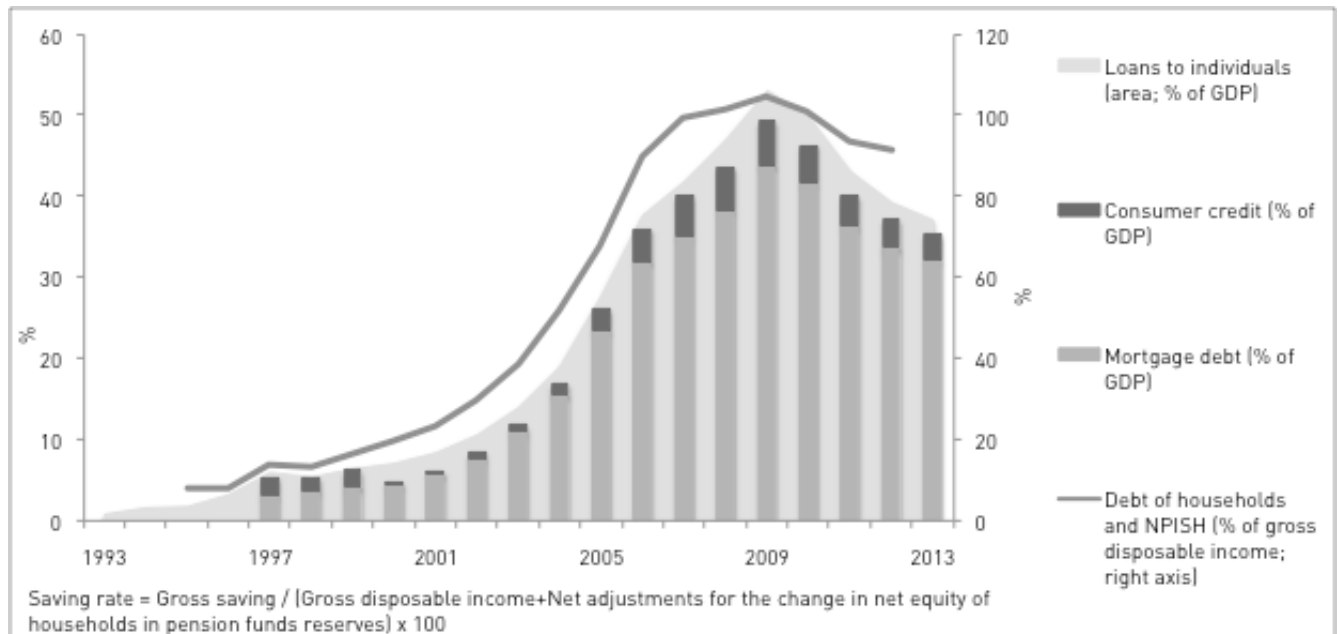
Estonian businesses. At the same time, demand deposit, i.e. current account, has been the most popular and liquid channel to save among private persons, despite the introduction of several investment and depositing products by banks. The high share of demand deposits in the asset structure of households could be also explained by the fact that employees in Estonia receive their monthly salaries on this account (Sörg and Tuusis 2008, 12-13). Securities have been unpopular among households, as only 4 per cent households held securities in 2004. The primary reason for the decreasing share of securities in households was the expiry of privatization vouchers (Kreitzberg 2005, 85). In addition, general unawareness of different forms of savings, low wage level, and the taxation system<sup>27</sup> has made it unaffordable and unattractive to invest in securities (see Koivu 2002, 4-8).

The growth of loan liabilities of households, on the other hand, has been revealed in the more than 40 per cent annual increase in the total volume of housing loans and leasing granted by Estonian banks and leasing companies between 2000-2005 (Bank of Estonia 2006b). As can be seen from the Figure 19, the level of household debt has increased from 5-6 per cent in the late 1990s to 53 per cent of GDP in 2009, while the ratio of debt to disposable income grew from 8 per cent in 1996 to 104 per cent in 2009. At the dawn of the credit boom in 2004, on average 18 per cent of a family's monthly net income went to service loan and interest payments, while for 1/5 of the debtors loan-servicing costs rose above 29 per cent of the family's net income (Bank of Estonia 2005b). By 2010, the average monthly debt servicing had climbed to 26 per cent of the households' monthly net income (Bank of Estonia 2011b).

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<sup>27</sup> Income from bank deposits is tax-free, while investment income from other sources is taxed.

**Figure 19. Household total debt and mortgage debt outstanding in Estonia, 1995-2012**



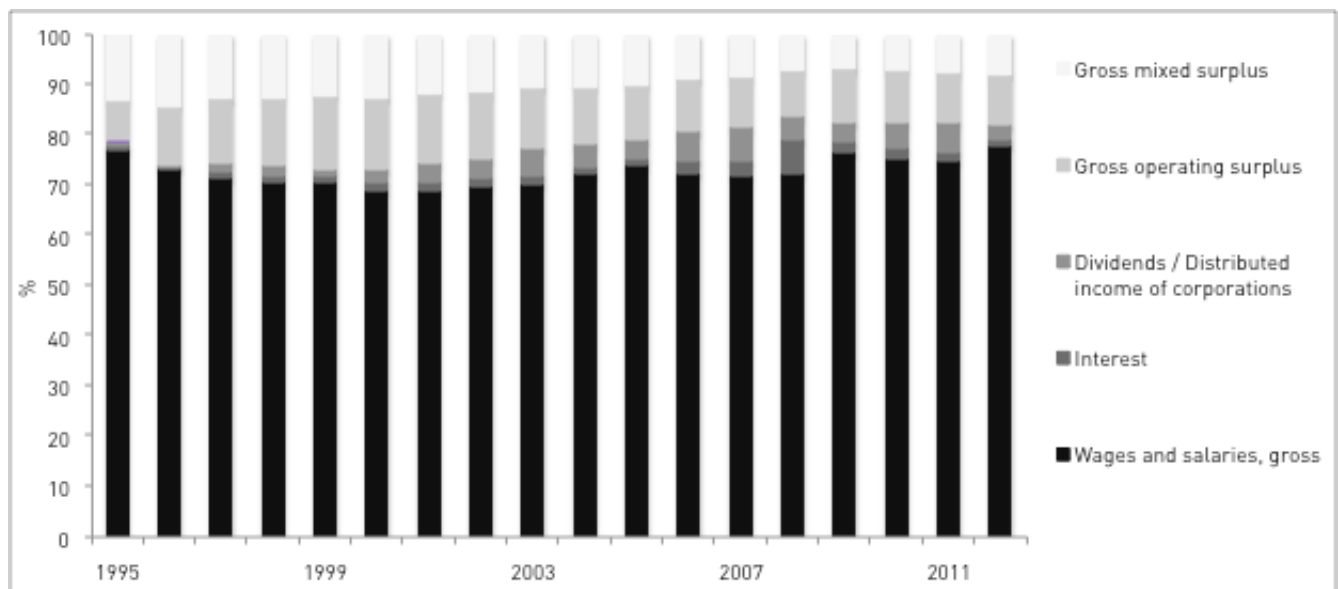
Source: Bank of Estonia 2014; OECD Statistics 2014; authors' calculations

However, in light of these developments, credit demand has been higher among medium-income families who have been able to service their loans and this alleviated the severity of banking problems (see Bank of Estonia 2004b; Bank of Estonia 2009b; Tänavsuu 2012). There is also evidence that households with an employed person, non-Estonian households and large households have higher credit demand (Meriküll 2012, 14-19). At the same time, the share of families that have taken a loan, mostly for purchasing or renovating housing, has remained relatively low - the share of families that have taken a housing loan/leasing in the total number of households increased from 8 per cent in 2004 to 22 per cent in 2008 (Bank of Estonia 2009b; Bank of Estonia 2006b). Still, the drastic expansion of mortgage loans is unveiled in the growth of outstanding housing loans of 29 times over a 9-year span from 287.6 million Euros in 2000 to 6.2 billion Euros in 2008 or from 4.1 per cent to 41 per cent of GDP (Varblane *et al.* 2009).

In the light of persistently high income inequality, wide-spread poverty, low public social safety nets, and relatively low minimum wages (see Aidukaite 2011; Eamets 2011), it is not

surprising that growing private consumption has been increasingly financed with debt. As covered above, rentier income has played an insignificant role in households' income and being irregular, as non-financial corporate sector has shown the signs of increasing dividend payments only in mid-2000s. Therefore, in Estonia, the primary source of income stems from paid employment, which is the dominant form of employment with the share of salaried workers at 40 per cent of the total population. During the period of 1996-2013, a household member received on an average 72 per cent of income from salaried work. Beside the paid employment the second most important source of income has been transfers, followed by individual work activities, i.e. entrepreneurship (see figure 20). Therefore, in the Estonian case we cannot observe the sustained level of consumption due to a higher marginal propensity to consume out of rentier income (see Onaran *et al.* 2011, 639, 655), as rentier income in household income has not increased significantly.

**Figure 20. Income composition of households, 1995-2013**



Source: Statistics Estonia 2014

More importantly, given that 68 per cent of households have problems with subsistence and at the same time the income gap between the lowest and highest income deciles has been decreasing (see Figure 21, also Figures 4 & 5), even half of the households in the upper

income deciles have difficulties in making ends meet. Thus, the majority of people living in Estonia spend their monthly income on everyday needs, while only a few households have used savings as an additional source to cover costs. In order to pay for larger lump-sum expenses (more expensive durable goods, renovation, tuition fees) and investments (purchase or renovation of housing), Estonian households have increasingly used loans – the share of households with the outstanding loan stock of all Estonian residents and non-residents grew sharply during the boom period, from 23 per cent to 43 per cent in 2001–2007 period, and reached even 50 per cent in 2011 (Meriküll 2012, 2). Increasing reliance on debt in financing consumption could be explained by the finding that households' consumption tends to react to previous periods' income changes, which in turn refers to proportional or 'from hand to mouth' consumption (Kukk *et al.* 2012, 32). Also, the fact that consumption expenditures have been higher than wages refers to the financing of consumption out of other sources, including loans. This has been revealed in the ratio of personal outlays (disposable income less personal saving) to disposable income rising from 0.92 in 1995 to 0.96 in 2000, 1.04 in 2005 and then dropping back to 0.90 in 2010, implying that from 2003 to 2007 Estonian household sector was net dissaver<sup>28</sup>. Hence, bank lending to individuals has been one of the main factors affecting the formation of consumption patterns of households. Expanding credit enabled households to broaden the consumption during the boom years, while the credit crunch in post-2008 period suppressed it.

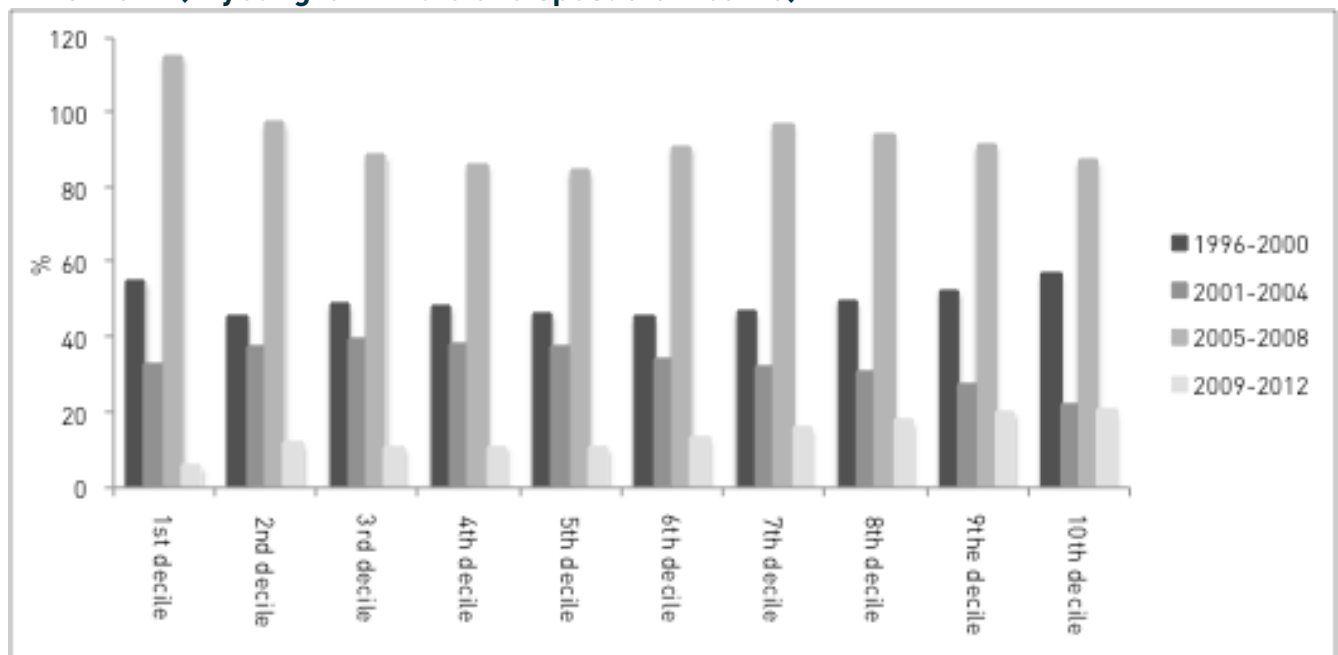
There are few studies that have indirectly referred to households' living conditions (consumption and savings patterns) within different income deciles by finding the probability of different household categories, such as single adult, two adults, adults with 1 child etc., belonging to one or another income deciles (see Lilienberg 2013). Most of the studies have analyzed, how the composition of households has impacted the structure of expenditures. It has been found that households with several adults are better off and have

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<sup>28</sup> During that period – 2003–2007 – the average dwelling prices rose at the annual rate of 29 per cent and the gross disposable income only at the rate of 14.5 per cent (Bank of Estonia 2014; OECD Statistics 2014; authors' calculations), which gave rise to mortgage loans taken out by households.

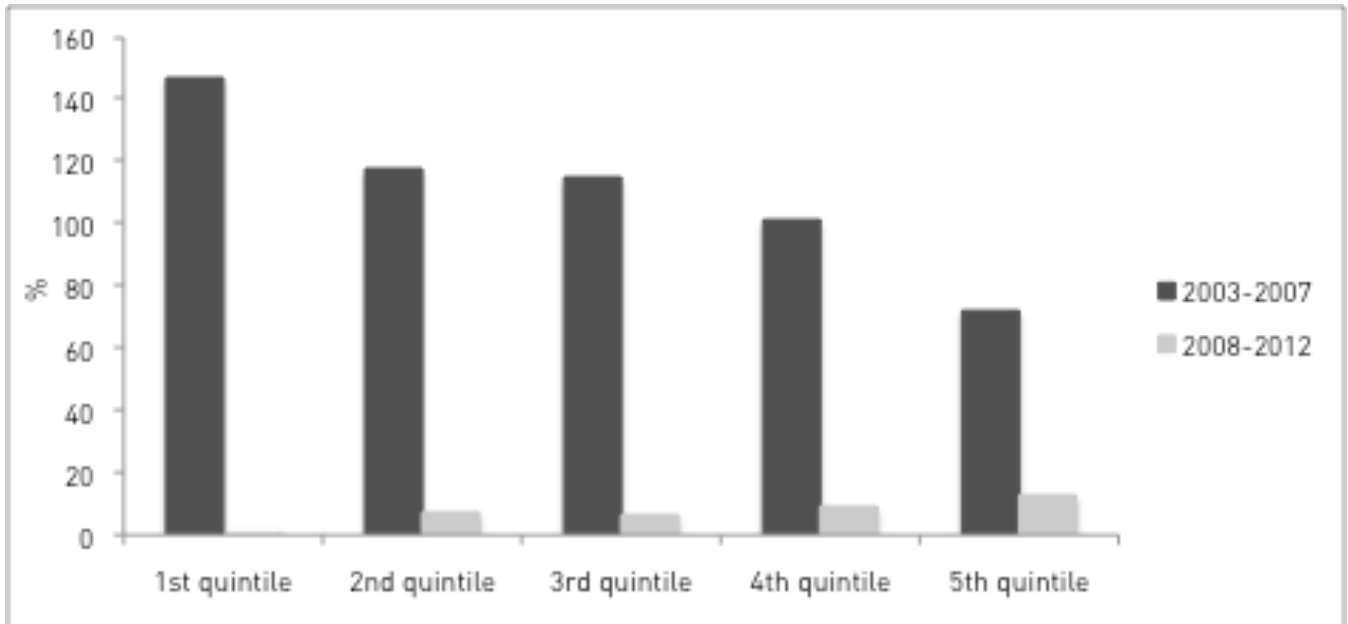
higher net income per household member compared to a household of a single parent with child(ren) or households with 3 or more children. Similarly, the latter households have fewer possibilities for saving out of total net income. While these households, together with retired persons, belong to the lower income deciles, the households with several adults occupy higher income deciles (Ahi 2013; see also Lilienberg 2013). Dynamics in the income growth within income deciles are presented in the figures 21 and 22, which reveal that the financial situation of above-mentioned household categories has improved, particularly among those in the lower income deciles and quintiles. Yet, rapid growth of disposable income among low-income earners that has outpaced the growth of those in the upper layers is due to very large initial income disparities and low level of income of those poorer segments in absolute and relative terms. Interestingly, better income growth indicators of lower deciles and quintiles occurred only during the booming years of early and mid-2000s. In the post-2008 period, the income growth of poorer segments essentially stagnated.

**Figure 21. Changes in disposable income of household member by incomes deciles, 1996-2012 (4-year growth rate of disposable income)**



Source: Statistics Estonia 2014

**Figure 22. Changes in disposable income of household member by incomes quintiles, 2003-2012 (5-year growth rate of disposable income)**

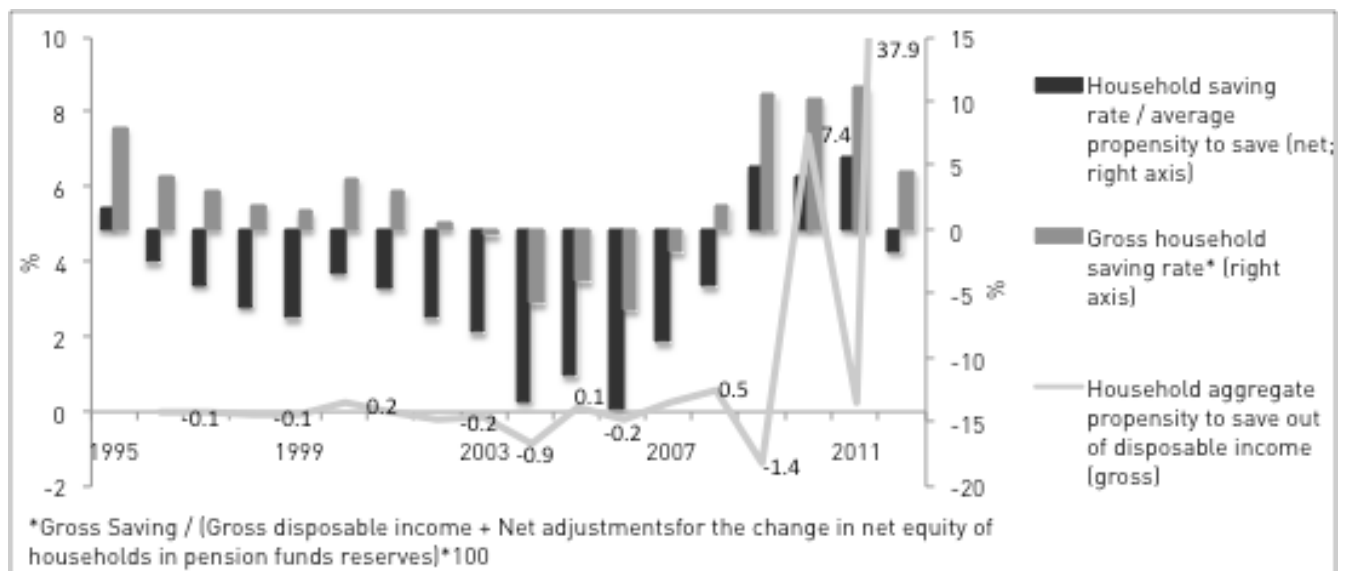


Source: Statistics Estonia 2014

Aside from the credit crunch, the low level of savings of Estonian households has been another reason why the 2008 crisis affected individuals so harshly by forcing people to abandon previous consumption patterns (Saluveer 2012). Household saving in Estonia makes up a substantially smaller share of GDP than in most western EU countries and the

low rate of household saving is one factor behind the substantial current account deficits in Estonia (Weber and Taube 1999; Kutos and Vogelmann 2005). While the saving rate, both gross and net, has been low and even negative, the aggregate marginal propensity to save out of disposable income has been negative for most of the years, implying that increasing disposable income has not incurred increased savings, but rather opposite. Only in late 2000s, one can see positive developments in this regard, although three years are exceptional: in 2009, gross savings increased significantly by 444 per cent on annual basis, but disposable income declined at the same time; 2010 and 2012 saw a decrease in both disposable income and savings, but the drop being larger in case of disposable income. Hence, such a high figure for the aggregate MPS indicator for these 2 years – 7.4 and 37.9, respectively (see figure 23).

**Figure 23. Households’ savings rate (net savings/net disposable income) and the marginal propensity to save out of disposable income, 1995-2012**



Source: Statistics Estonia 2014; OECD Statistics 2014; authors’ calculations

With regard to factors affecting the saving behavior, different forms of financial assets and access to liquidity have been found to reduce household saving, but also debt liabilities and debt servicing payments have led to lower savings (Kulikov *et al.* 2007; Kukk 2014). Similarly, Pikkani and Randveer (1999, 6-7) have referred to increasing bank loans to

private individuals, rapid economic growth, better economic outlook, and stock market boom in late 1990s that explained relatively low level of savings among households already in the 1990s (see also Saluveer 2012). At the same time, they concluded that economic growth in Estonia has increased the average marginal propensity to save out of disposable income. This has been confirmed in a study by Kulikov *et al.* (2007) on the impact of varying variables, such as income, wealth and financial exposure on the saving rate of households, which found that higher income leads to higher savings<sup>29</sup> (see Table 5). In spite of the availability of data only for 2006 and 2010-2012, patterns in average propensity to save are clear. However, figures for marginal propensity to save out of disposable income within different income quintiles can be presented only for 2011 and 2012, which do not enable us to draw any conclusions, although it is evident that the 1<sup>st</sup> income quintile has significantly lower MPS among income level groups.

**Table 5. Aggregate MPC and APC of different income level groups, 2006-2012**

<b>MPS</b>	<b>2006</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
First quintile			-0.05	0.34
Second quintile			0.93	0.90
Third quintile			0.54	1.02
Fourth quintile			1.09	0.51
Fifth quintile			0.94	0.82
<b>APS</b>	<b>2006</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
First quintile	0.21	0.26	0.24	0.25
Second quintile	0.37	0.37	0.40	0.44
Third quintile	0.44	0.47	0.47	0.52
Fourth quintile	0.45	0.52	0.57	0.57
Fifth quintile	0.53	0.57	0.60	0.62

Source: Statistics Estonia 2014; authors' calculations

On the one hand, the ownership of real estate ownership has been found to have no effect household savings (Kulikov *et al.* 2007). Similarly, the marginal propensity to consume out of housing wealth stood at the low 1.1 per cent level before the crisis of 2007/08 (Paabut and Kattai 2007), which does not support the financialization argument in terms of the

<sup>29</sup> Interestingly, Kulikov *et al.* (2007, 8) reached the conclusion that households comprising of middle-aged individuals with higher level of education, have saved less, compared to other households, consisting of retired and younger individuals, which contradicts the life cycle hypothesis.



wealth effects, that is, increasing housing and financial assets' prices upholding or even increasing consumption (see Onaran *et al.* 2011, 639, 655). Such a low level was due to the illiquidity of real estate, the purchases of real estate for accommodation during the period of 1997-2005, not so much for speculation or investments, and the fact that home and property ownership as the main components of non-financial household wealth are widespread among households in Estonia as a result of the property restitution and privatization that took place in the 1990s (today, almost 90 per cent of households own some kind of real estate).

Given the positive relation between the cyclical fluctuation of GDP and changes in consumption as well as savings of households, it reveals the applicability of absolute income hypothesis in the Estonian case – consumption reacting to changes in current incomes, whereas savings also increase in light of increasing incomes, in particular, within the high-income earners' categories. In addition, due to relatively meager living standard in Estonia, in the context of relative income hypothesis it is not surprising that households had to adjust their consumption behavior and use savings during the economic recession, in particular, those households in the lower income deciles who did not accumulate enough savings during the boom years in order to maintain the consumption level in post-2008 period (Saluveer 2012, 70). All in all, one can observe living beyond one's means and higher loan liabilities within the category of higher income earners, as stated above, but also the overall poverty of the majority of the population (Lilienberg 2013).

On the other hand, the reasons behind the debt-led consumption have to be addressed also within the context of transition process. First, the several episodes of banking crises in the 1990s, accompanied by short maturities, poor legal environment for mortgages, controlled rents, and high inflation all constrained housing finance (Bonin and Wachtel 2003; IBRD 1996). The following acquisition of local banks by the Scandinavian credit institutions stabilized the banking landscape, restored trust in banks, and increased capital inflows to be directed into the Estonian economy. However, due to the destruction of the Soviet legacy,

discussed in the first chapter, the domestic banking sector was gradually alienated from the domestic productive sector and instead focused on consumption and real estate (see Kattel 2010, 54). At the same time, the situation in the housing market changed in the early 2000s with the accomplishment of privatization of real estate that coincided with falling real interest rates, increasing housing prices, and the integration of local banks into the multinational banking groups through acquisitions. The combination of these factors introduced consumer and mortgage lending by banks and kept the clients interested in taking mortgage and consumption loans, which is reflected in increasing indebtedness of households (see Bohle 2014; Molnár 2010; Bernhardtson and Billborn 2010, 10-11; Figure 7). Thus, the financial deregulation and aggressive lending strategy of foreign-owned banks in 2000s eliminated borrowing constraints on consumers and contributed to households' meager propensity to save that in the early 1990s was caused by re-occurring banking crises and hyperinflation. Furthermore, strong growth and improved macroeconomic as well as structural conditions, accompanied by generous state interest subsidies for households and other budgetary enticements, introduced in early 2000s, supported ballooning mortgage lending in 2000s (Barisitz 2005; Myant *et al.* 2013). Boom on the real estate market was upheld by public policies in terms of guarantees extended by the Estonian Credit and Export Guarantee Fund, KredEx that enabled people to take out housing loans at a down payment of just 10 per cent. In addition, the state provided the opportunity to deduct housing loan interests from taxable income, all of which spurred the real estate boom.

There was also a positive link between capital inflows and house price developments in Estonia (Jevcák *et al.* 2010). In that respect, the escalating mortgage loans have been manifest in the price hikes in real estate (see Table 6) that was one of the largest in Europe. The average rise in apartment prices in Tallinn was so fast that a person earning average wage was not able to purchase even one square meter of a two-room apartment for a whole net monthly income. Therefore, the emergence of booming real estate market from

2004 to 2007 was supported by the privatization process, gradual reduction of interest rates, loosening credit policy by well-capitalized and financially backed Nordic banks, moderate inflation, wage growth that outpaced productivity growth, and fiscal incentives.

Second, the workings of demonstration effect in the transition process in terms of catching up with consumption patterns of Western economies that was accompanied by the introduction of new financial products and services to households, reveal the interaction of changing institutional structures and social norms that resulted in debt-financed consumption boom in 2000s before the crisis. These changes coincided with the increasing awareness of financing possibilities and improving financial literacy of the population for the credit products to be used for consumption purposes. For instance, between 1995 and 2008, the number of total bankcards grew from 120000 to 1845588, while the number of credit cards grew from 15572 in 1997 to 444762 in 2008 (Bank of Estonia 2014). At the same time, by elaborating on the determinants of consumption patterns in line with the behavioral concepts and their emphasis on consumption and social norms (see Cynamon and Fazzari 2008; Frank *et al.* 2010), one cannot overrule the stimulus impact of persistent income inequalities and wealth concentration on expenditure behavior of poorer segments of the population or even the pressure to spend beyond one's means. Still, contrary to the findings of Iacoviello (2008), the rise in debt of households has not been accompanied or caused by increasing income inequality that has decreased and stabilized during the booming years of 2000s.

All things considered, increasing mortgage loans have incurred several vulnerabilities for both household institutional sector and the whole economy. This stems from the high level of foreign-currency denominated loans up until 2011, when Estonian joined the Euro-zone. Namely, 90 per cent of the mortgage loans were denominated in Euros at adjustable interest rates before the crisis (Bank of Estonia 2010b). This made the repayment capacity of borrowers dependent on employment situation, the evolution of real estate prices (see Table 6), and to a significant extent on continued low interest rates. As can be seen, during

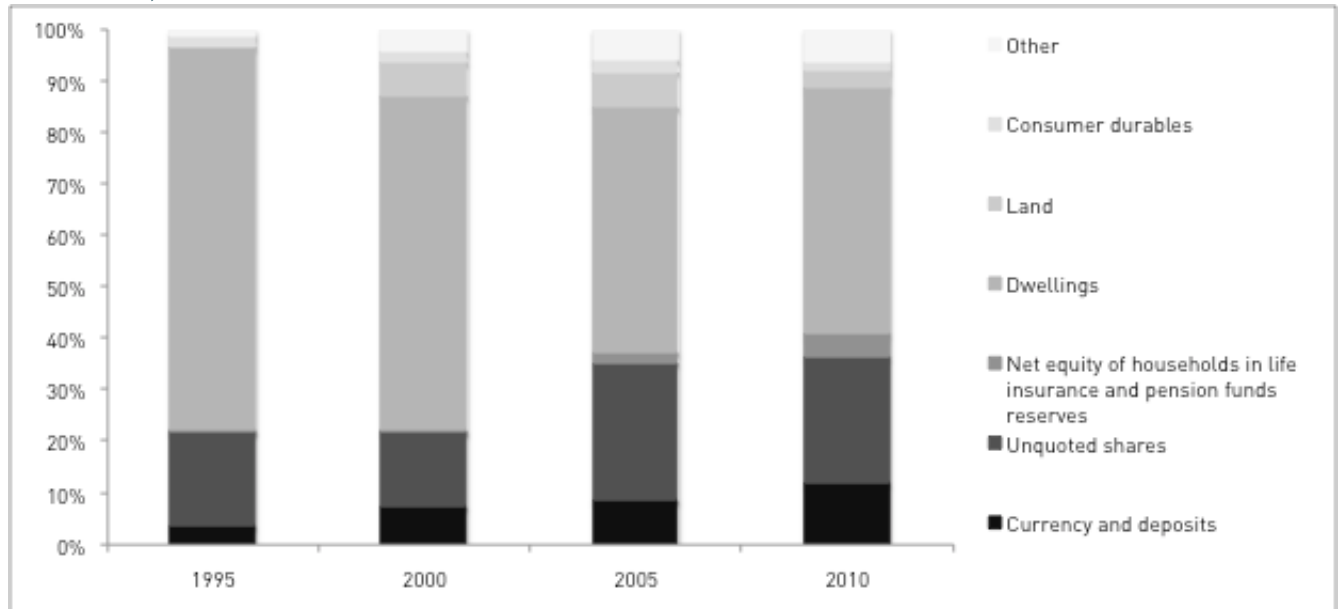
the 2000s, Estonia witnessed a rise in household wealth, largely driven by increases in real estate value that was accompanied by a change in favor of shares (and other financial assets) (see Figure 24; also Boone and Girouard 2002 on G7 countries).

**Table 6. Growth of selected real estate indicators in Estonia, 1997-2011**

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Average purchase-sale price per square meter of dwellings of satisfactory condition in Tallinn (Euros)	249	268	275	326	396	601	588	761	933	1476	1821	1463	741	n/a	n/a	n/a	n/a
The number of purchase-sale contracts (thousand)	4.5	6.9	9.2	14.7	20.4	25.7	35.5	42.9	56.1	60.2	49.3	34	26.3	30.9	32.3	36.2	41.7
The value of purchase-sale contracts (mln Euros)	115	176	270	437	608	819	1193	1680	3034	4716	3738	2101	1135	1204	1522	1727	2040
Additional floor area of dwellings (thousand m <sup>2</sup> )	57	120	68	65	80	70	110	220	280	320	400	560	460	310	230	210	n/a

Source: Statistics Estonia 2014

**Figure 24. Total wealth decomposition (financial wealth, housing wealth, other wealth) in Estonia, 1995-2010**



Source: OECD Statistics 2014

Secondly, the rapid growth in the debt burden together with the rise in real estate prices that preceded the recession has rendered Estonia into a country facing a risk of creditless recovery. Hence, the continuously modest borrowing activity, not to say, a large-scale drop in demand for credit, and the decrease in outstanding loan stock in Estonia after the recession is not surprising. Partly, the sluggish recovery in credit demand is explained by changed household endowments such as income reduction and lower income expectations, although changed behavioral relations, such as taking mortgages less often and employed individuals using credit less often, also matter. Finally, Estonia's pre-crisis real estate boom and the subsequent drop in the value of collateral have played a role in lowering credit demand (Meriküll 2012).

Third, the debt burden of households has increased through the re-financing of previous loans. Here the loan sharks have taken advantage of the situation with aggressive marketing campaigns. In a way, irresponsible lending by credit institutions during the boom years in mid 2000s, coupled by the e-hype, has facilitated the emergence of loan sharks, who have extended so-called ninja loans, i.e. high interest rate loans to no-income and no-

job borrowers via easily accessible electronic channels, including mobiles. The clearest evidence of the financial problems of heavily indebted borrowers is a high number of help seekers (on average 70 per month in the capital city), who turn to social workers in local municipalities to look for financial advice and debt counseling (Kotto 2012). Nonetheless, the susceptibility to apply for these high interest rate loans has increased during the post-2008 recession, as on average the share of inescapable expenses, i.e. expenditure on housing and food in household budgets, has increased to 45% and has been aggravated by the fall in real incomes (Bank of Estonia 2011a, 13).

Therefore, in the household institutional sector, one can observe a vicious circle of aggregate debt-financed expansion that has implied increasing financial fragility due to a greater leverage (see Minsky 2008; also Cynamon and Fazzari 2008 on the US case). In a typical scenario of the realization of the vulnerability of the economy to negative shocks that create financial problems and defaults, Estonian credit institutions tightened credit standards and raised risk premiums that contracted debt and shut down the engine of aggregated demand growth (see the last section on crisis channels in Estonia). In that sense, bank lending to individuals has behaved in a pro-cyclical manner by increasing during the booming years and contracting in the post-2008 period (see Männasoo 2003, 30).

In sum, given the declining share of wages that has comprised 72 per cent of household income on average for the period of 1995-2012 and still persisting income inequalities with meager public social safety nets and overall pressures to squeeze labor costs, private consumption that has upheld the rapid economic growth, has been increasingly financed with debt. Yet again, increasing indebtedness has been witnessed among certain groups of the society, such as medium-income households. To some extent, the increasing borrowing that has been secured on rising real estate values, has enabled households to withdraw part of the rise in housing wealth and use the proceeds for additional consumption financing, despite the finding that the marginal propensity to consume out of housing wealth stood at the low 1.1 per cent level before the crisis of 2007/08, which does not

support the financialization argument in terms of the wealth effects. On the other hand, the exploding use of different banking products and services – mortgage loans, banking cards, consumer credit etc. – reveal the most typical element of the conventional financialization process in Estonia that was made possible by the inflow of foreign capital, intermediated to households through the foreign-owned banks.

Against the skyrocketing bank lending to individuals and the deteriorating ratio of debt to disposable income, savings of the household sector have been relatively low and were decreasing gradually till the dawn of the crisis. Moreover, the aggregate marginal propensity to save out of disposable income has been negative for most of the years, implying that increasing disposable income has not incurred increased savings in the household sector, but rather opposite. At the same time, the aggregate average propensity to save out of disposable income increases by moving to higher income quintiles or deciles, despite the finding that the growth of income of those belonging to the lower income deciles and quintiles has been faster. In that regard, both absolute and relative income hypothesis have been applicable in the Estonian case. The latter has upheld due to meager living standard in Estonia that has necessitated the use of bank loans and savings, when available. Related to the relative income hypothesis argument, one cannot overrule the workings of demonstration effect in the transition process in terms of catching up with consumption patterns of Western economies that was accompanied by the introduction of new financial products and services to households. This, in turn, reveals the interaction of changing institutional structures and social norms that resulted in debt-financed consumption boom in 2000s before the crisis. The portrayed developments in the household sector could be referred to as privatized Keynesianism that has entailed a shift from counter-cyclical state policies for securing income and employment to the growth of private credit to households for compensation of low salaries and job insecurity. All in all, one can observe living beyond one's means and higher loan liabilities within the category of higher income earners, but also the overall poverty of the majority of the population.

## 5. CURRENT ACCOUNT DYNAMICS

Since 1991, the political landscape in Estonia has been dominated by a neo-liberal ideology with little recognition of alternative ideas. Yet, in 1991, several legal acts related to foreign currency transactions stipulated restrictions on capital account transactions, requirements on registration of foreign loans, etc. There were strict requirements for resident legal persons: 1) on repatriation of income generated abroad and held on foreign banks' accounts, 2) for getting a permit to open an account in a foreign bank abroad. In 1991-92, there were severe restrictions in opening a foreign currency account in Estonia; resident natural persons were banned from making transactions on their foreign currency accounts in Estonia, if sources of foreign currency income were not proven. In spite of having regulations on foreign currency transactions, currency exchange, and inflow as well as outflow of foreign cash, the legislation was considered rather liberal due to no restrictions on: 1) capital outflow after the payment of taxes, 2) crediting in foreign currency (foreign loans were only required to be registered), 3) investment or export-import transactions, and 4) foreign currency convertibility. Moreover, law on tax incentives for foreign-owned companies from 1991 exempted foreign-owned companies with foreign shares of more than 30 per cent from income tax for 2-3 years and further reduced the income tax by 50 per cent for the following years that signaled the government's policy of attracting foreign capital to Estonia. In addition, Foreign Investments Act from 1991 exempted foreign investors' assets, including capital investments made in Estonia, from customs duty. All restrictive regulations on capital transactions were loosened during the next 4 years and eventually were totally abolished in 1994. Financial liberalization<sup>30</sup> in terms of capital

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<sup>30</sup> Despite the liberalization of foreign trade and capital account transaction in the early 1990s, Estonia did not suffer from currency crises, as it has relied on currency board arrangement (pegged, fixed exchange rate) and conservative fiscal policies that implied reliance on and faith in automatic adjustment mechanisms in the markets. In principle, monetary policy – interest and exchange rate determination – was outsourced in Estonia and intervention into the markets with any kind of protective measures was not perceived as a necessary policy tool by the regulators. Similarly, deregulation and liberalization of international capital accounts has not created the problem of speculative capital flows, at least into the financial sector, as neither banks nor investment firms in Estonia have concluded any complicated speculative financial transactions that



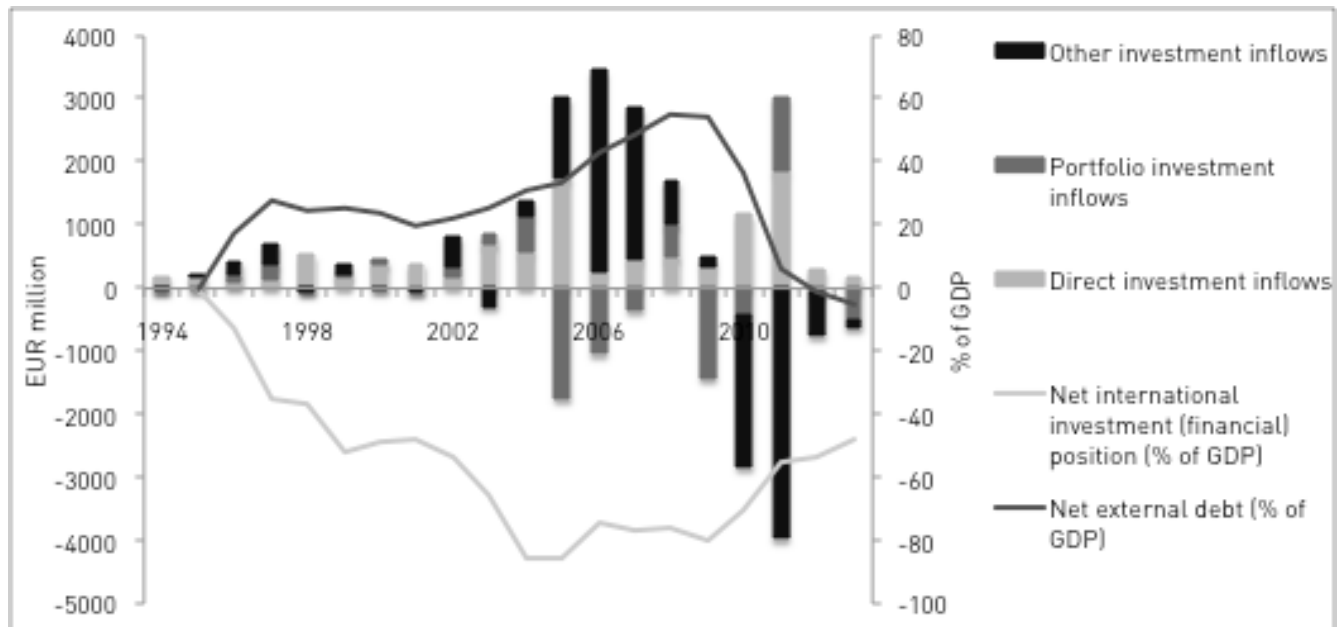
account, financial sector, and stock market liberalization, was an essential part of the accession process to the EU. As a result of rather radical reforms in the first part of the 1990s, Estonia was one of the first countries in CEE region to abolish restrictions on capital movement and become an open economy (Bank of Estonia 2001; Liuhto *et al.* 2007).

Therefore, underpinned by the liberalization of external accounts, inward FDI and other investments in terms of foreign loans as well as currency and deposits induced an increase in domestic demand that exceeded the value added by domestic production, and hence the fast growth in import demand, including for a bulk of components and intermediate products used for subcontracting (see Estonian Institute... 2010, 49; Tiits *et al.* 2004, 3; Tiits *et al.* 2006, 51). By 2000, inward FDI stock in GDP had reached 46.6 per cent and by 2010 87.2 per cent. Net other investments, at the same time, increased from -2.8 million EUR or -0.9 per cent of total financial account balance in 2000 to 2.2 billion EUR or 91.5 per cent of financial balance account in 2007 (Hunya 2009; Bank of Estonia 2012; see Figure 25).

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has been revealed in a very low level of trading activity, while the types of financial instruments and transactions negotiable on the Estonian market have been narrow-ranged (see Auväärt 2013; Oja 2012, 2013). For instance, foreign debt securities have been the dominant assets in the portfolio of banks, while the shares held for trading staying at low level (3 per cent of securities portfolio in 2001) (Lepik and Tõrs 2002).

**Figure 25. Financial account balance and net financial position in Estonia, 1995-2013**

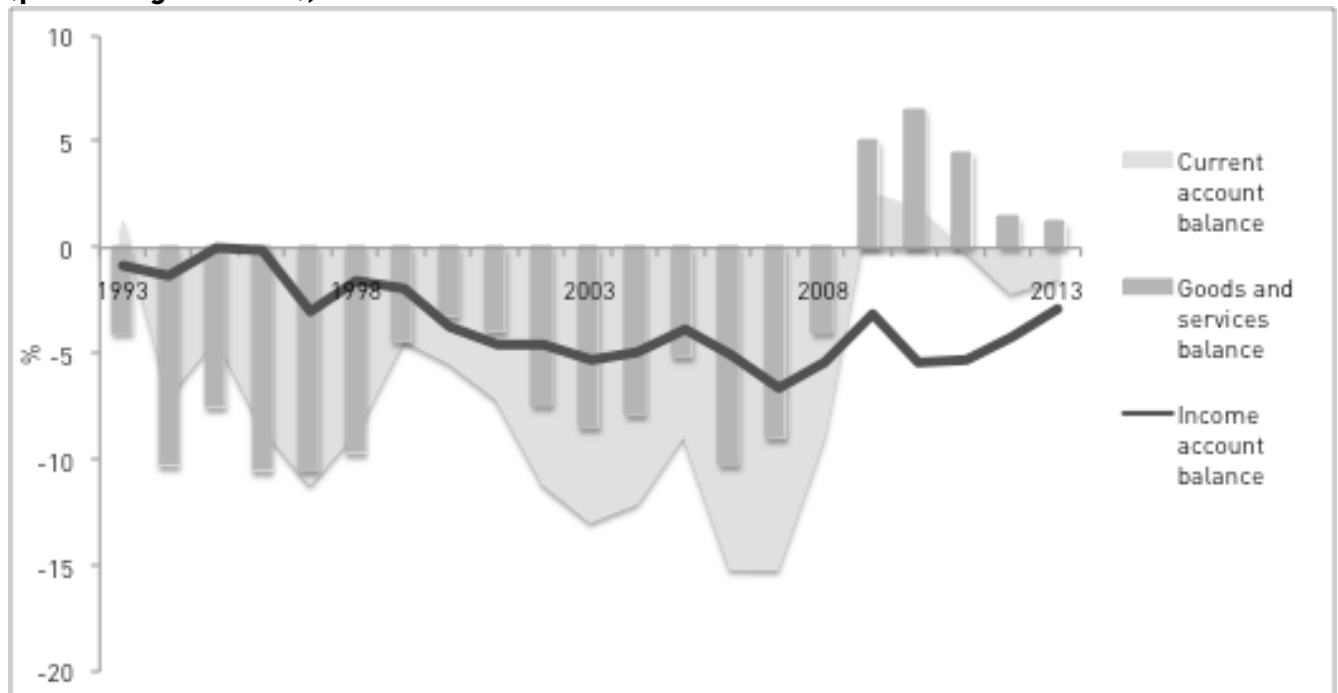


Source: Bank of Estonia 2014

These foreign capital inflows that fueled the growth have increased financial fragility in terms of significant current account deficits and growing private debt. Compared to 2000, when Estonia's gross external debt reached 60 per cent of GDP, the debt level increased to 84 per cent in 2004 and 117 per cent of GDP by 2008 (Bank of Estonia 2009a). Mostly, it could be ascribed to the activities of foreign-owned banks that have had several implications for macro-economic (in)stability in terms of internal and external (im)balances, one them being an exceptional, but unsustainable economic growth with expanding sheltered sector (see Atanas and Sanne 2013; Klingen 2013; Ross 2013). As domestic savings have been insufficient to cover investment and consumption demand, the combination of demand pressures and access to cheap credit, intermediated through the banking sector, resulted in asset price inflation and widening current account deficits which is not sustainable in medium or long term and being one of the main threats to the Estonian economy (Barisitz 2005; Tiits *et al.* 2006, 51; see figure 26). External and internal imbalances were further aggravated by the appreciating real exchange rates since 2001 as a result of strong capital inflows (EBRD 2006). In general, the nature of the Estonian

economy could be described as of prevailing negative current account and the growth of consumption, but also investments on credit, compensated by the inflow of foreign savings in the form of FDI and loans. This has led to the problem of mounting international debt, but also the inability to control consumption levels beyond the country's earnings and failures to build export potential to finance growth in domestic consumption (see Myant and Drahekoupil 2011; Grigoriev and Abigalov 2011, 25-35; Lumiste *et al.* 2008; Olenko 2006, 66-68; Madureira *et al.* 2007, 39; Hannula and Tamm 2002, 28; Tiits *et al.* 2008).

**Figure 26. Balance of goods and services and current account balance in Estonia (percentage of GDP), 1993-2013**



Source: Bank of Estonia 2014

Aside from the impact of banks on external imbalance, it has been also influenced by the operation of MNCs that have transferred part of their production to Estonia, where taxes and wages have been relatively low – almost tenfold difference in wages between Estonian and Scandinavian manufacturing sectors in the 1990s (Reiljan 2006, 256). As a consequence, low-value-added and relatively low-paid labor-intensive production, including sub-contracting, has dominated in Estonia's export for a long period (Gerndorf *et*

*al.* 1999; Tiits *et al.* 2004). Subcontracting trade has influenced the trade balance<sup>31</sup> particularly with Finland and Sweden, as main trading partners. In 2000 subcontracting exports were 62-68 per cent of the total exports to Nordic countries, consisting mainly of machinery and equipment, as clear examples of intra-firm trade, where multinationals have imported semi-finished products and exported final products to the Western markets, hence contributing to both exports and imports in trade balance, but also to current account imbalance with the outflow of profits (Samary 2012; Figures 9 and 19 above). In these circumstances, the challenge has been to increase the complexity<sup>32</sup> of the production in order to reduce the vulnerability stemming from subcontracting exports' volatility and uncertain flows compared to direct exports. The reason for that is that the company filling the subcontracting orders cannot count on market forces and has great dependence on the parent company's decisions and on the demand of the partner country's industry (Ehrlich *et al.* 2002, 16-20).

In principle, several negative dynamics have been present in the Estonian economy that have influenced foreign trade, such as many industries being opened one-sidedly to foreign competition, slower growth of productivity relative to real wages<sup>33</sup>, appreciation of the real exchange rate of Estonian kroon (see Figure 27), and the concentration of Estonian exports on labor and raw material intensive industries, where the rate of value added is lower

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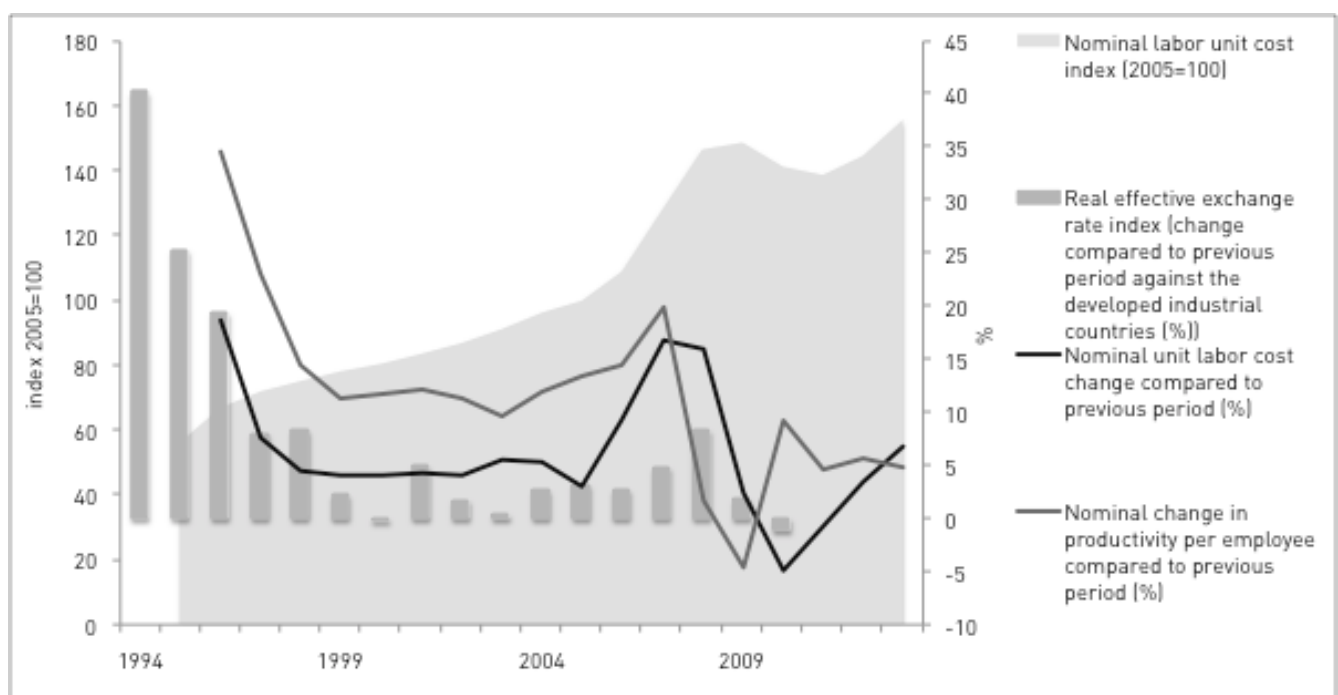
<sup>31</sup> It is noteworthy that only one large subsidiary company, Elcoteq that produces mobile phones and their equipment, in Estonia has significantly influenced the trade balance of Estonia, as at times, Elcoteq has given alone almost 15 to 20 per cent of Estonian exports (Kalvet 2004).

<sup>32</sup> This has been revealed in the decreasing share of medium- and high-technology enterprises in total value added and the specialization in low value added industrial activities with low costs of used resources that have deteriorated economy's competitiveness (Tiits *et al.* 2004, 7). As stated by Tiits *et al.* 2006 (5) „ ... the technological structure of industry is not growing more knowledge intensive and complex, quite the opposite – distribution of labor is decreasing, so is specialization, skills and quantity of skilled labor force; capacity to exploit new and emerging technologies is also on decline.” Similarly, even though there has been an increase in the share of more technology-driven sectors in the Estonian exports, their contribution to the added value of exports has turned out to be considerably smaller than that of several more traditional resource-intensive sectors. Consequently, Estonian medium and low technology enterprises tend to operate under the conditions of diseconomies of scale, that is, increasing volume leads to a decrease in the amount of added value per unit (*ibid.*, 57-58).

<sup>33</sup> Aside from the labor cost argument, exporting by Estonian companies has been aggravated by the intensive competition by foreign companies in targeted markets and transport costs (Kaarna *et al.* 2012, 63).

compared to capital intensive industries (Reiljan *et al.* 2000, 309–310; Tiits *et al.* 2004, 3). On the other hand, one could blame the status of a catching-up economy that has incurred higher demand for capital goods and hence a negative trade and current account balance for most of the periods during the past twenty years (Kattai 2011, 60).

**Figure 27. Productivity, unit labor costs, and real effective exchange rate in Estonia, 1994-2013**



Source: Bank of Estonia statistics 2014; Statistics Estonia 2014; IMF World Economic Outlook data 2014; OECD Statistics 2014

Given the deteriorating price competitiveness of the Estonian economy on the international arena, domestic demand, in particular, private consumption (see Figures 1 and 2), has been upheld by foreign savings, which has increased the vulnerability of the economy to external fluctuations, as seen in the next chapter.

In conclusion, Estonia has suffered from chronic current account deficits and soaring external debt, as typical for an external debt-led development path. This was enabled by the rapid liberalization of current and capital account transactions in the 1990s or in other words, shock therapy that killed the domestic production base with cheaper imports. At the

same time, the country has been unable build up export potential to finance the growth in domestic consumption, as sub-contracted low value-added produce has dominated in Estonia's export. Furthermore, slower growth of productivity, relative to wages, and the appreciation of the real exchange rate of the Estonian kroon have negatively affected foreign trade. On the other hand, one could blame the status of a catching-up economy that has incurred higher demand for capital goods and hence a negative trade balance and current account deficit for most of the years. Hence, once again, the transition and financialization processes have affected the current account balance and dynamics at the same time, given the soaring external indebtedness of the Estonian private sector in financing the current account deficits, but also the inability of the economy to withstand the external competition after the shock therapy in the 1990s.

## **6. THE CRISIS OF 2007/08 IN ESTONIA**

The credit/housing boom of the 2000s and eventual crisis were inevitable consequences of deeper structural problems that were created through the restructuring of the economy in the 1990s, as the furious restructuring had implied de-industrialization and specialization in low value-added activities (see Kattel 2010, 50-51; Männik *et al.* 2006). On the other hand, the financial strategy that has been based on exchange-rate stabilization by the means of currency-board system and fiscal discipline, implied an external debt-led growth, which created a carry trade of easy credit in the 2000s and entailed increasing financial fragility, i.e. growing risks of reversal of capital flows as well as currency appreciation<sup>34</sup>, which were amplified by the extreme openness of the economy (see Thorhallsson and Kattel 2012).

The combination of structural dependence on uncontrolled capital inflow and deteriorating competitiveness of the local economy led to accumulating imbalances in terms of large

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<sup>34</sup> The currency board arrangement impeded external adjustments in a timely manner to alleviate the deepening imbalances in the Estonian economy. Furthermore, pegging the currency significantly impacted output and economic activity due to appreciation of real exchange rate, which was driven by high price and wage increase as well as large capital flows (see Pilinkus *et al.* 2011, 393; Bernhardtson and Billborn 2010, 10-11).

current account deficits that persisted throughout the years until 2009. In other words, macroeconomic vulnerability has been associated with a structural savings shortfall, evident in current account deficits, excessive loan-to-deposit ratios, and an ongoing funding need from parent banks (see Lehmann *et al.* 2010). Moreover, instead of building up sustainable production capacity, foreign-funded rapid credit growth fueled consumption and investments in non-tradable sectors, which in turn, increased both interest and currency risks. This was due to lowered risk-perception and market signals that resulted in leveraged structures and extensive use of credit for inappropriate debt-financed investments in terms of distribution and amount. In Estonia, excessive demand and easy credit resulted in external financing being concentrated in a limited number of economic activities, such as real estate and construction, that triggered speculation-led inflation (Lucas 2009; Kattel 2009, 11-13). The exceptional growth rates that were achieved by speculative behavior led to unrealistic expectations of ongoing growth, which, in turn, attracted additional foreign capital. In such a spiraling vicious circle, Estonia's stock of gross private external debt rose to more than 100 per cent of GDP at end 2007. Apart from the accumulation of net foreign liabilities, also double-digit inflation and accelerating wage growth<sup>35</sup> signaled the overheating of the economy (see Kattel 2010; Festić 2012; Bernhardtson and Billborn 2010; Grigoriev and Abigalov 2011, 33-35; Kattel and Raudla 2012; OECD 2011; Coudert and Pouvelle 2010 on increasing imbalances in the Estonian economy). In general, it is the combination of several factors that has driven deepening financial fragility in Estonia (see Onaran 2012; Bohle and Greskovits 2012; EBRD 2006; Kattel and Raudla 2013; Myant and Drahokoupil 2011):

- highly leveraged economic units<sup>36</sup>;
- appreciating currency in real terms that deteriorated the competitiveness of exports;

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<sup>35</sup> For instance, the annual growth rate of unit labor costs increased from 2.5 per cent in 2000 to 17.5 per cent level in 2007 (OECD Statistics 2014; Kattel and Primi 2008, 10-14, 17-19).

<sup>36</sup> Corporate leverage in Estonia in 2008 was one of the highest among the CEECs (Szikszai *et al.* 2012).

- worsening net international investment position and current account deficit, in particular, continuous deficit on the income account (repatriation of profits earned on FDI);
- high ratio of foreign debt to GDP;
- inflating assets and increasing wages with meager productivity gains;
- inappropriate distribution of foreign capital – financing of non-tradable goods;
- lost risk-perception that led to endogenous fragility;
- currency and maturity mismatches.

These features reveal the typical situation of financial fragility that Minsky's analysis addressed. The build-up of financialized economic growth and development model that heavily relies on the absorption of external funding for meeting domestic demand can be sustained only by further capital inflows with the outcome of ever-increasing external debt servicing. Also, given the FDI-dominated manufacturing sector with matured low- or medium-technologies that face the saturation of markets, low profit margins, and decreasing demand, the Minsky moment and eventual crisis can be realized by the drop in FDI stock due to shrinking profits and plummeting stock prices that would induce capital flight. Furthermore, massive sale-offs of inflated assets would have a contagion effect that leads to decreasing value of assets and shareholders' equity, implying the typical Minsky's *Ponzi* position, where liabilities of indebted entities cannot be met.

As to the susceptibility to financial contagion, Weller and Morzuch (2000) argued that default risk has been lower in CEE transition countries than in developing economies due to less speculative financing. Syllignakis and Kouretas (2010) on the other hand, have found evidence on the existence of contagion effects, manifest in the herding behavior in the post-2008 period and associated with the increased involvement of foreign investors in the real economy and stock markets<sup>37</sup> in CEECs. This is due to the openness that has been taken

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<sup>37</sup> Concerning the stock market in Estonia, Kuusk (2012) found that changes in the US stock market returns are to be followed by changes in the same direction in the Estonian stock market, but the same cannot be said



almost to extremes and was one of the main reasons behind noticeable success in the transition period before 2007-08 events. Concerning the particular channels of the 2008 global crisis<sup>38</sup> that impacted the Estonian economy, there are two ones that could be brought out.

The first is the liquidity and funding channel, as in an international comparison, Estonian banks rely less on deposits than other new EU member states, which has implied an intensified foreign external borrowing (Juks 2004, 20). Financial channel is especially operative during the economic boom periods, when investors have more free funds to allocate into transition economies. Remarkable finding of the modeling, undertaken by Danilov (2003), is asymmetric capital flows in relation to stages of business cycles or positive feedback mechanisms between business cycles and capital flows that could increase the danger of financial bubbles during the growth phase of the cycle. Hence, in case of the problems with parent banks in the Nordic countries, the subsidiaries and branches located in Estonia are in danger of being affected through a rise in funding costs<sup>39</sup>. The development of the Estonian banking market, including the growth rate of loans, has been affected by the operations and objectives of Nordic banking groups. In essence, market sentiments towards the European banking and real estate markets as a whole have been much more relevant for Estonian financial intermediaries than the direct impact of the rise in money market interest rates or the correction on the stock market

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about changes in volatility. Thus, there is some evidence of contagious transmission of financial crisis of 2008 from the US to the Estonian stock market, but the contagion has been rather weak.

<sup>38</sup> A recent episode of the both real sector and banking crisis occurred in 1997/98, when some of the industries, including the food industry, made considerable loans with the commercial banks in order to be able to operate in the Eastern market, which affected also indirectly the Estonian banks via the increasing share of bad loans. As a consequence, commercial banks took over bad debt companies and sold them mainly to foreign investors with downsizing of operations as part of the process. Other large enterprises went through the bankruptcy process. Yet, there were cases where large shareholders succeeded to transfer essential assets of bad debt companies to new companies before the bankruptcy procedures that were controlled by the same shareholders (Gerndorf *et al.* 1999).

<sup>39</sup> High sensitivity of the issue is due to the situation in the Estonian banking market, where two subsidiaries and two branches of foreign banks hold a systemically important market share – 89 per cent of the market, based on loans granted to non-financial sector in 2013 (FSA 2014).

(see Bank of Estonia 2008). In principle, reliance on foreign capital has meant that foreign bank ownership exacerbated the “normal” business cycle in Estonia, aside from exposing the country to foreign financial turmoil. Also, given a high share of foreign liabilities on the balance sheets of foreign-owned banks, the possibility of deleveraging and divestment has always remained on the agenda. Multinational banks can easily relocate funds to different markets through their internal capital markets, in particular, when hints of economic instability emerge or simply on the basis of expected risks and returns calculations that expedite capital flight. Estonia with other CEECs has faced a risk of foreign banks abandoning the host country in case of mounting credit losses or shifting bad loans from other countries to a subsidiary in a host country, leaving host country depositors and taxpayers to wear the burden of bank resolution (see Althammer and Haselmann 2011; Haselmann 2006; de Haas and van Lelyveld 2006; Khoury and Wihlborg 2006). It has been found that foreign-owned banks play a dual role during two different episodes of crises: contributors to stability during domestically induced turmoil, but in case of global or home market crisis, importers of instability from abroad<sup>40</sup> (Goldberg 2009; De Haas and Lelyveld 2011; Bonin *et al.* 2008). In that respect, foreign banks reduced lending earlier and faster than domestically owned banks in the wake of the global turmoil in 2008 (see Claessens and Van Horen 2012; De Haas and Lelyveld 2011; EBRD 2012). Among CEECs, capital outflows that were materialized through portfolio investment and financial derivatives, and followed by outflows of other investments, affected particularly the Estonian<sup>41</sup> banking

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<sup>40</sup> Because of that, there is a potential for conflict, if a home country regulator perceives a foreign subsidiary as a small part of a multinational bank, but for a host country's financial sector, in particular in Estonia, it is an important player. Hence, the challenge for Estonia lies in the coordination of supranational regulation and supervision (see Spendzharova 2014). Several authors (Kask 2005; Kal Wajid *et al.* 2007) have indicated three types of problems in cross-border banking crisis management: insufficient information, limited power, and conflict of interest. In the case of Estonia, the institutional framework has to adhere to differing approaches and principles in the division of tasks for supervision, deposit guarantee schemes and governmental capital support between home and host country. The centralization of key business functions, such as liquidity and risk management has made separate assessments of subsidiaries more difficult, when the obligation for general financial stability runs along the national borders.

<sup>41</sup> Full-blown banking crisis in Estonia was mitigated by the subsidiaries' access Swedish government support measures to the banking sector in home country, sizeable capital buffers through retained earnings, and

sector in 2008-09 that had high level of net foreign liabilities (Jevcák *et al.* 2010). Hence, given the dependence of the local economy on external funding that underpinned double-digit growth rates, the drying-up of international inter-bank as well as debt markets put the brakes on capital inflows to Estonia. Consequently, reduced access to credit as well as tightened credit standards, coupled with increased cost of funding and overall uncertainty about economic prospects, resulted in weakened consumption, borrowing, and investment activities after 2008 (see Király *et al.* 2008; Kaarna *et al.* 2012, 49).

The second channel is external trade due to high openness of the Estonian economy that has implied the dependence of its economic performance on trade partners' business cycle and other external events, including shocks. These aspects impact Estonian export volumes that are essential for covering the payments for imported goods of no domestic substitutes, as is typical in a very small economy (Kattai 2011, 60). Dynamics in the EU have statistically significant positive effects on the Estonian trade and some impact on industrial production. In particular, the trade channel has a significant role in transmitting the EU's impacts to Estonia as well as in increasing the synchronization of business cycles (see Figure 2 on exports contribution to GDP growth). As already stated above in the last section, exports' role in channeling the EU's developments to Estonia has been found in relation to subcontracting trade. Hence, when witnessing the recessionary trends in Estonia, external trade with the EU could be seen as a transmission mechanism of the EU's impact for getting the Estonian economy back to its feet (see Danilov 2003). In Estonia, extensive intra-industry trade with Western trading partner countries, which is reflected in it selling more than half of industrial output on foreign markets (Estonian Institute... 2010, 49-50; Tiits *et al.* 2008), has kept the local economy afloat. Hence, should it experience a significant contraction, the income of the banking sector and the loan quality could suffer a setback (see Bank of Estonia 2012). Vulnerabilities related to external demand as a source of

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sound capital adequacy ratio that stood at over two times the 10 per cent minimum (EBRD 2009; Lahnsteiner 2010; Bernhardtson and Billborn 2010, 19-20).

foreign exchange income have been increased due to the lending to unhedged borrowers in foreign currencies, exposing the economy to foreign exchange risk in terms of the threat of wide-spread private sector defaults sparked by devaluation (see Lehmann *et al.* 2011; Bonin *et al.* 2008; Barisitz 2008; Myant and Drahokoupil 2011). Although the high share of foreign currency-denominated loans in total loans<sup>42</sup> has increased the default risks on the non-financial sector side, in principle, large depreciations have transformed this currency risk into credit risk for the banking sector (see Dietrich *et al.* 2011, 421; Csajbok *et al.* 2010, 4). However, credit risk was reduced by the activity of banks and borrowers in preventing problems and finding solutions to maintain the loan servicing ability. Yet, decreasing income levels and tightened budgets meant that borrowers' capability of servicing debt remained the greatest threat to financial stability in Estonia (Bank of Estonia 2010b). Banks themselves, on the other hand, have not been the main source of credit risk or systemic risk, since the largest banks are the net debtors of foreign parent banks, while being irrelevant debtors on the local interbank market, unlike in developed interbank markets in Europe (Valužis and Židulina 2009, 106-107).

The third potential channel could be the negative monetary shock stemming from the EU level. Namely, relatively high indebtedness of households and companies has increased the sensitivity of their debt servicing discipline to an increase in the Euribor rate, which transmits the Euro area common monetary policy signals to the Estonian financial market. In that case, households' disposable income would fall with a rise in servicing financial liabilities and cuts in private spending. Similarly, the corporate sector would have to halt fixed capital formation, while decline in credit turnover would make it more expensive to finance investments from bank lending. Consequently, private sector investments and total output would drop (Kattai 2011, 98-100).

As a result of the global financial crisis and the realization of its impact through the two

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<sup>42</sup> Over 80 cent of all loans were issued in foreign currency in Estonia, mostly in Euros, before Estonia joined the eurozone in 2011 (EBRD 2009, 2012). Hence, as the potential transmission channel of the 2008, the issue of currency mismatch has been off the agenda since 2011.

main channels, mentioned above, the Estonian economy plummeted by 14 per cent in 2009. Investments were undermined by the underutilization of productive resources, while tax increases and high unemployment that reached almost 20 per cent at one point in 2010, deteriorated private consumption (Bank of Estonia 2010c). On the other hand, the possibilities to switch to the export-led growth that would balance declining domestic demand after 2007 were hampered by the declining external demand, although current account turned positive due to larger fall in imports than in exports. Affected by the fall in aggregate demand, bankruptcies and unemployment soared, while the creditworthiness of the borrowers deteriorated (see Bernhardtson and Billborn 2010, 14-15). Thus, the main effect of the financial crisis in 2008 was rapidly increasing unemployment, coupled with decreasing working hours and nominal wages, which indicated a rather large flexibility in labor market and weak unionization. The biggest decrease in employment occurred in the sectors, where demand rapidly dropped, e.g. in the construction sector, where the employment rate declined by over 40 per cent, while manufacturing was another sector struggling with above-average unemployment growth rate (Bank of Estonia 2010b). The overall result has been a high share of long-term unemployed in the conditions of underfinanced social protection and lacking active labor market policies (Eamets 2011). Essentially, the crisis in 2008 affected the real economy by increased risk premiums, stricter credit conditions, and drop in assets prices, which undermined investments and private consumption (Swedbank 2009).

## **6.1 Policy responses to the 'crisis'**

Because of the embeddedness of neo-liberal and non-corporatist features in the Estonian political-institutional system, analytical competences to deal with the consequences of crisis were non-existent and alien for policy-makers. The same macroeconomic policy environment in terms of conservatism in fiscal policies<sup>43</sup> and neutrality in monetary policies

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<sup>43</sup> Unlike most of the other countries, fiscal conservatism has been also revealed in the absence of government bonds, issued in local Kroon money market.

has been sustained for almost 20 years since the early 1990s with the belief in simple taxation system, based on the principle of proportional and uniform tax rates, and balanced government budget for the purpose of the price and macroeconomic stability. From the political economy perspective, one could argue that the public policies have followed the principles of economic Darwinism with no state support whatsoever. Reasons for such a position could be found in the policy measures implemented during the previous crises in the 1990s. Fiscal policy choices made in the 1990s became path-dependent as a result of positive feedback loops from previous periods of fiscal consolidation. During the previous major crises in the 1990s, governments responded by cutting expenditures to curtail the budget deficit. As the period of fiscal retrenchment was followed by economic recovery, the conception of such causality became rooted in the mindset of politicians. Given the high growth rates during the 1990s and early 2000s, the economic success has been ascribed to the adopted policy choices that could not be neglected nor challenged without getting politically stigmatized. Such a path-dependency has been further reinforced by the lack of institutional capabilities created by initial macroeconomic policy choices, which in turn, hindered the development of specific institutions for more activist macroeconomic management. Moreover, governments embraced the idea of maintaining balanced budget, which was propagated throughout the years by IMF in the Estonian public finance discourse. Thus, at the outset of financial crisis in 2008, there was essentially no experience with alternative macroeconomic policy ideas among politicians or public servants due to the lack of a domestic heterodox economic tradition. These developments explain the passive attitude and the implementation of vigorous austerity measures in the aftermath of 2008 crisis, fueled by the desire to join the Euro-zone as a way out of economic recession by attracting foreign investors and raising confidence in the Estonian economy.

In line with the propositions of some leading scholars in Estonia (e.g. Varblane *et al.* 2009) for addressing the real estate bubble burst with the avoidance of expansionary fiscal policy, higher borrower responsibility, and the initiation of wage and price cuts, the government's

behavior during the crisis was weak and followed pro-cyclical approach. The only tool envisioned was an adjustment with budgetary cuts in investments, transfers, and the government wage bill in 2009 that were complemented by tax rise and increased absorption of the EU funding that covered widening budget deficit gap by constituting 12 per cent of the entire 2009 budget and exceeded 4 per cent of GDP. Without these transfers, Estonia would have faced much worse public deficit or unemployment figures (Kattel 2010, 41-44; Raudla and Kattel 2011). Moreover, due to the currency board arrangement, which implied the limited possibilities for the central bank to provide liquidity or bailouts for troubled banks in case of liquidity or solvency problems, Estonia has essentially outsourced its monetary policy in terms of interest and exchange rate determination. Therefore, Estonia opted for internal devaluation<sup>44</sup> of the currency, which implied the downward adjustment of nominal wages and fiscal contraction (Kattel and Raudla 2012, 2). Another response was related to turning labor market more flexible, which resulted in persistently high unemployment without significantly higher social expenditure due to relatively low and brief benefits (*ibid.*, 3). Thus, under the conditions of high indebtedness and reduced government expenditures, internal devaluation via wage cuts for the purpose of improving external balance and attract new investments had essentially a negative effect on domestic demand and employment. In that respect, Estonia stands out from Western European countries with higher level of social acceptability for drastic measures to deal with the crisis and the weaker acceptance of the need for a government role in overcoming the effects of the crisis. Hence, fears over the level of public debt have set limits to any social-democratic strategy that could have raised concerns over long-term economic weaknesses, revealed by the crisis (see Myant *et al.* 2013; also Kattel and Raudla 2013; Alfred *et al.* 2012).

Nonetheless, several regulatory amendments and initiatives were undertaken in response to the global financial crisis in 2008. First, the government decided to guarantee the

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<sup>44</sup> The arguments of the need to protect foreign creditors and maintain good reputation on international arena were echoed in the resistance to undertake external devaluation, which would have damaged the financial position of credit institutions.

deposits, including the deposits of large companies, held with credit institutions registered in Estonia and in the branches of foreign credit institutions to the extent of 100 per cent of their accounts, but up to a maximum of 50,000 Euros initially, although later raising it to 100,000 Euros per depositor. Moreover, the state's opportunities to give banks guarantees or loans for coping with liquidity or solvency problems, should it be necessary, were improved. In order to ease the limitations of the currency board arrangement in terms of the ability to act as a lender of last resort, the Bank of Estonia worked out a framework for granting emergency liquidity assistance to troubled credit institutions against sufficient collateral in the context of crisis management. Furthermore, the Parliament passed a bill in 2009 that was related to the financial crisis management by the state. The law clarified the conditions, when the state reserve (stabilization reserve) can be used to address a financial crisis. It also stipulated the speeding up of decision-making processes in the Parliament during the financial crisis by permitting single decisions to be made in one reading instead of the customary two. Also, the rights of the Financial Supervision Authority were expanded for intervention into and inspection of the activities of banks in crisis. Particularly in 2010 and 2011, power of the Financial Supervision Authority was expanded, e.g. authority to require a reduction of the performance pay, amendments in internal rules, an increase in own funds in the reorganization plan, including increase in share capital, and to make a proposal to amend or supplement the organizational structure of a credit institution among others. Moreover, the state was granted the right to consider expropriating the shares held by the owners of banks operating in Estonia. That said, interference into the everyday activities of credit institutions was allowed only in the event of a breach of legal acts regulating the activities of banks, or when unjustifiably high risks were taken that could endanger the interests of creditors. The most significant development, however, was the enforcement of Debt Restructuring and Debt Protection Act in 2011 to enable individuals in financial difficulty to restructure their debts, thus offering them an alternative to personal bankruptcy. Related to Debt Restructuring and Debt Protection Act, there have been amendments in other legal acts (Law of Obligations Act) for



regulating the activities of non-bank financiers, i.e. so-called 'ninja loan providers'. Due to their aggressive and even exploitative marketing strategies, several amendments were made in 2009 and 2012 in advertising and debt regulating legal acts in accordance to the EU directives. These amendments concerned the establishment of responsible lending principle, codes in the calculation of debt servicing ability of borrowers, the requirement on the content of advertisements, and setting upper limits on credit costs, i.e. interest rates, based on average monthly loan interest rate of credit institutions, announced by the central bank.

All in all, the institutional causes of the increasing financial fragility in Estonia were rooted in both fixed exchange rate system and overall liberal economic policies that left policy-makers only with traditional fiscal policies as the main tools to alleviate external imbalances, while the prudential capital-account controls or specific FDI policies have been off the agenda. Most of the amendments in the legislation in the post-2008 period have been undertaken in line with the external (EU) developments and which have been mostly of a precautionary nature in order to mitigate the re-occurrence of the overheating real estate market and halt the increasing indebtedness of the private sector, mainly households.

## **7. CONCLUSIONS**

As the study showed, no clear long-term trends along the real sector categories and variables are detectable in the Estonian case that could be attributed to the financialization process, as conceived and perceived of in Western economies. This has been due to a rather different manifestation of the financialization process in Estonia, which could be interpreted as a heavy reliance on foreign savings in financing economic growth. In this regard, FDI-led catching-up process has affected to great extent all four studied variables of the Estonian real sector. Moreover, when considering the long-term effects of financialization on the real sector variables, one has to bear in mind that the period of the market economy itself in Estonia has been very short – around 20 years. This has been

accompanied by another problem that needs to be taken into account when drawing conclusions. Namely, the unreliability of the data. Modern accounting standards were implemented only in mid-1990s, so earlier data is either non-consistent or at worst, non-existent. This was the period of introducing legislative framework and a lot of uncertainty, which enabled businesses (and households) to manipulate with the figures in reporting. On top of it, the development story of last 20+ years in Estonia has revealed peculiar features that are not found in many economies, if at all.

In principle, many dynamics in the economy are rather attributable to transition process to market economy than to the financialization processes, which presents some controversies in the Estonian case and makes it problematic to distinguish transition effects from financialization effects or to see the financialization processes in the 'conventional' understanding of the term behind the transition process. Rather, fluctuations in the Estonian economy have depended on developments outside the country, such as the EU monetary policy and structural funds, and decisions made by parent companies in the Nordic countries. Thus, it has been challenging to position Estonia into one or another category within the varieties of capitalism framework. Yet, in broad terms, Estonia could be classified as following the debt-led consumption development pattern, in particular in 2000s, with gradually deteriorating financial balance against the rest of the world until 2009. So, in general, Estonia is seen as neo-liberal 'peripheral market economy' with structural weaknesses in the economy, particularly in the export structure and industries, and reliance on financialized development that essentially has meant dependence on foreign borrowing and other financial inflows to support private-sector activity, including consumption, and to cover current account deficits. Such a heavy reliance on foreign savings had also significant ramifications for the 2007/08 crisis in Estonia.

The way, how Estonia was affected by the 2008 crisis, can be traced to regime-specific economic structure and patterns of international integration, that is, through the financial sector. The Estonian course of radical liberalization entailed the vicious circle, manifest in

the accelerated deindustrialization and collapse of complex industries, accompanied by a weak export potential in traditional light and resource-based industries and services at the core of the production profile. Also, the problems of restructuring of R&D and innovation activities were treated as marginal, characterized by “shock without therapy” approach (see Radošević 1999), implying lost R&D supply channels as well as absorptive capacities. For that reason, only credit could expand the purchasing power of most of the population and which explains the increasing indebtedness of private entities, indicating to a kind of “privatized (house price) Keynesianism” that entailed a shift from counter-cyclical state policies for securing income and employment to the growth of private credit to low-and middle-income groups for compensation of low salaries and job insecurity. It was under the pressure of rising unemployment, poverty, and social unrest as well as financial constraints that Estonia opted for the privatization of welfare provision and retrenchment. One can observe a vicious circle of consumer credit, mortgage lending, and a construction and housing boom reinforcing each other with dire consequences for export competitiveness due to galloping inflation and appreciating real exchange rate within a system of fixed exchange rate. Due to the propensity to use bank credit for consumption rather than investments, the domestic market orientation of foreign loans has eroded the margins of safety by insufficient generation of foreign currency earnings to meet the external liabilities. Hence, such an external financing of the economy without sufficient buffers revealed the *Ponzi* financing position of the Estonian economy, when the global crisis of 2008 hit the country. Unrestricted capital inflows have been feeding the monetary expansion, which led to inflationary trends and deteriorating real exchange rate. These factors contributed to the widening current account deficit and the increasing external debt level of the economy. Thus, owing to a rapid development of simpler manufacturing activities in a low-cost and flexible environment with easy access to international credit, unsustainable financialized growth took off. Essentially, against the conditions of ‘economic Darwinism’, i.e. leaving the survival of enterprises to be determined by the market forces alone without any significant assistance from the government, the economy has been

locked into continuing dependence on foreign capital inflows that would keep the economy afloat and maintain the ability to service the debt.

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## **THE ABSTRACT OF THE PROJECT IS:**

The research programme will integrate diverse levels, methods and disciplinary traditions with the aim of developing a comprehensive policy agenda for changing the role of the financial system to help achieve a future which is sustainable in environmental, social and economic terms. The programme involves an integrated and balanced consortium involving partners from 14 countries that has unsurpassed experience of deploying diverse perspectives both within economics and across disciplines inclusive of economics. The programme is distinctively pluralistic, and aims to forge alliances across the social sciences, so as to understand how finance can better serve economic, social and environmental needs. The central issues addressed are the ways in which the growth and performance of economies in the last 30 years have been dependent on the characteristics of the processes of financialisation; how has financialisation impacted on the achievement of specific economic, social, and environmental objectives?; the nature of the relationship between financialisation and the sustainability of the financial system, economic development and the environment?; the lessons to be drawn from the crisis about the nature and impacts of financialisation? ; what are the requisites of a financial system able to support a process of sustainable development, broadly conceived?

## THE PARTNERS IN THE CONSORTIUM ARE:

Participant Number	Participant organisation name	Country
1 (Coordinator)	University of Leeds	UK
2	University of Siena	Italy
3	School of Oriental and African Studies	UK
4	Fondation Nationale des Sciences Politiques	France
5	Pour la Solidarite, Brussels	Belgium
6	Poznan University of Economics	Poland
7	Tallin University of Technology	Estonia
8	Berlin School of Economics and Law	Germany
9	Centre for Social Studies, University of Coimbra	Portugal
10	University of Pannonia, Veszprem	Hungary
11	National and Kapodistrian University of Athens	Greece
12	Middle East Technical University, Ankara	Turkey
13	Lund University	Sweden
14	University of Witwatersrand	South Africa
15	University of the Basque Country, Bilbao	Spain



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