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Investment and Loan Growth: Few Questions on Recent Turkish Experience

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Abstract

Following the global financial crisis researchers in advanced economies dwelled on the question of a state of weak investment in times of favourable liquidity conditions. During this period emerging and developing economies were relatively strong on the growth side, some even turning into macro prudential policies to control overheating. Turkey being one of the acclaimed economies of prudential policy measures has also been experiencing a stalled investment recently. This mere observation brings out few questions about the relation between investment and loan growth in Turkey. Mainly looking from banking lending perspective, this study tries to raise questions about investment demand and sectoral preferences.

Keywords: Investment, Credit, Growth .

JEL classification:. E22, E51, O40

1. INTRODUCTION

In a recent research by Özatay (2015) one characteristic of Turkish economy was pointed out as loss of momentum in private investment growth since the Global Crisis of 2008. The questions raised and proposed explanations in Özatay (2015) paper focuses on the fact that the Turkish economy was one worst hit emerging economy in the post Global Crisis period. The growth performance was weak, external vulnerabilities were heightened, and investment was declining, compared to peer emerging economies of the G20. While these issues remain valid and present for Turkish economy, a different set of policies are also being discussed, namely macro prudential policies, addressing financial stability and accumulation of systemic risk on credit (financial) cycle. This seems to be as a dilemma for policy makers that, while worrying about under achievement on the basis of national accounting aggregates, they are concerned about excessive credit growth –used as the most used financial cycle indicator-.

This paper aims to raise further questions about this aforementioned economic and financial environment, in hope for expanding our (mainly the authors) understanding of linkages between these variables.

2. WRITING THE PAPER

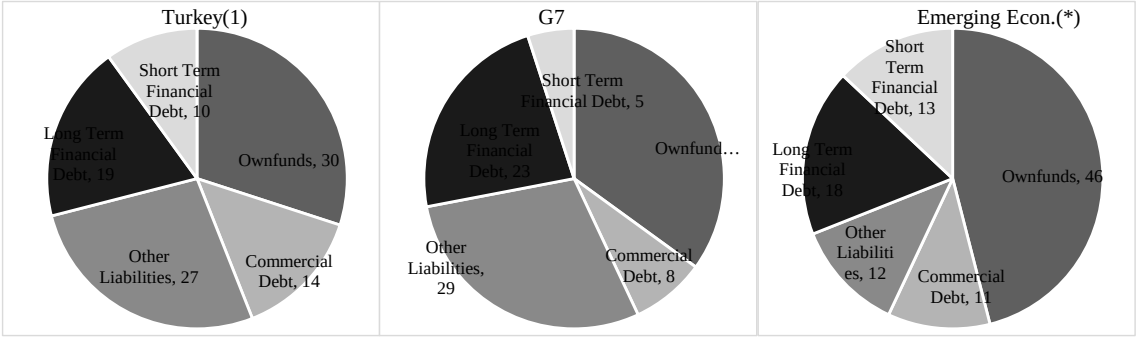
The literature about the determinants of investment is highly extensive. A recent research by Barkbu et. al (2015) provides a more than adequate literature survey about the determinants of investment. Chirinko (1993) also states that the "*…formal models have been less successful in empirical implementation and hence in providing insights into the determinants of investment spending"* pointing out the fact that empirical models (based on consistant theory) seems to be the better way to understand the issue. Moreover, formal or not, economic theory suggests that weak growth is one of the main factors behind the weak evolution of investment, through the traditional accelerator model.

Recent research by IMF (such as Barbu et.al.(2015), BIS (Banerjee, Kearns and Lombardi (2015)) and ECB (2014, and Balta (2014)) take on the investment issue on more of applied perspective and try to tackle the issue from the weak growth causality. However, while these research address the issue of weak investment which is mainly explained by the lower production level and an increased economic and political uncertainty, which makes firms reluctant to invest, especially for some emerging market economies, which are said to be decoupling, the lack of access to external funding can have been a factor. Hence, in comes the issue of global liquidity and availability of external funds to these economies. Given the policy response to global crisis and contracted economic activity, all major central banks pumped global liquidity to new heights, where external borrowing conditions remained significantly favourable up to this day.

2.1. Bank Lending and Investment

Corporate finance theory suggests that for a given firm an investment expenditure is financed by own funds (auto-finance) and/or by external finance. From a broader perspective firm data indicates a high utilization of (or need for) external finance for Turkish corporate sector. For example according to Central Banks firm balance sheet survey, share of bank loans in firms' liabilities has risen from 19% to around 26% as of 2014. Additionally ratio of debt to equity is around 130% for ISO500 firms.

Figure 1. Corporate Liability Structure

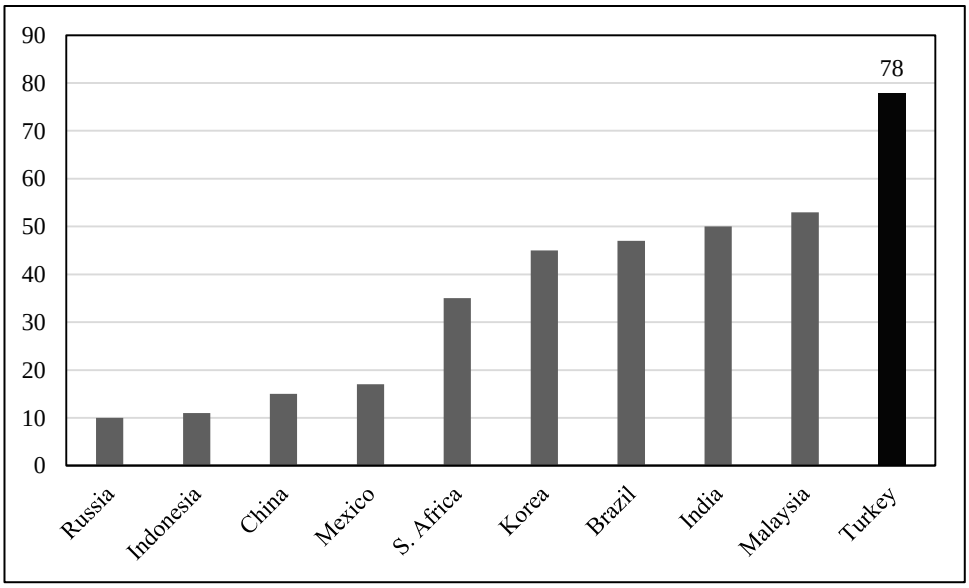


Soource: ISO

(1) Average of Non-Financial Quoted Firms (*) Russia, S. Africa, Brazil, Mexico, India, China, Indonesia, Korea

Moreover the use of financial sector is predominantly bank based. This can be easily seen by looking at the structure of the Turkish financial system, where almost 70% of total financial assets comprises of banks, and 87.5% of financial intermediation is by banks. The flip side of the coin is the firms, and according to World Bank data, the percentage of number of firms using banks for investment finance is close to 80%, supporting the former evidence.

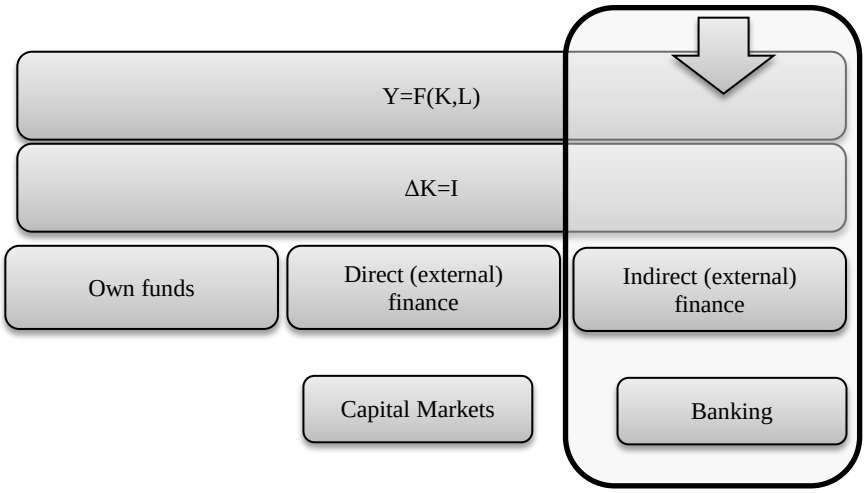
Figure 2. Share of number of Firms using Banks for Investment Finance



Source: World Bank

Thus moving along with this fact, one can claim that, firms major source for investment funding is loans, thus bank loans would play a direct role on economic activity in Turkey.

Figure 1. Finance-Investment-Production



Source: Turhan, Sakarya, Gökgöz (2014)

This brings the question of aforementioned Özatay findings and reaction of economic policy makers towards loan growth. Thus while concerning about an underperforming economy, policy makers are also taking measures towards mitigating systemic risk by controlling loan growth.

Table 1: Growth, Investment and Capital Inflows

	2002-2007	2008-2014	2012-2015
Growth (Turkey)	6.8	3.4	3.1
Growth (Emerging Econ.)	7.1	5.3	4.9
Private ınvestment	19.1	3.4	-1.2
Machinery	23.1	4.8	-3.1
Net Capital Inflow/GDP	5.7	6.7	7.6
Net FDI /GDP	2.02	1.31	0.97
Req. Capital Flow for 1 point growth	0.84	1.97	2.45

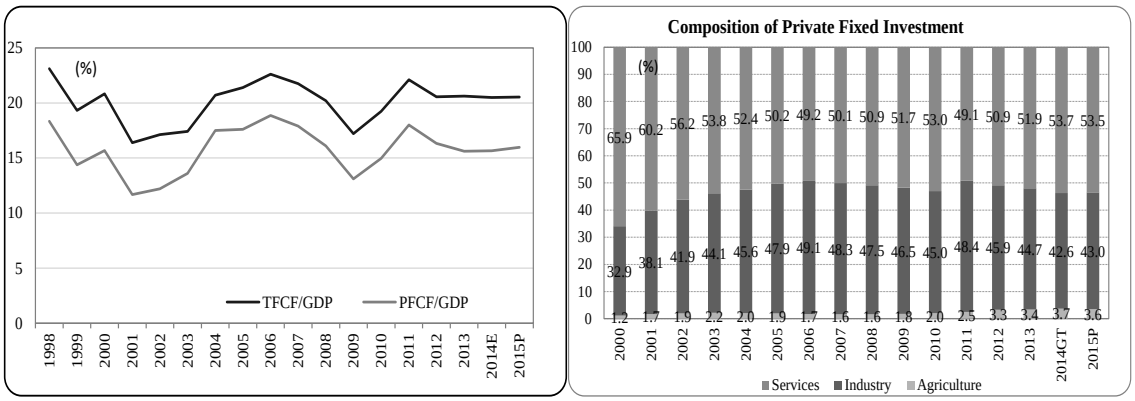
Source: Özatay (2015)

This may still be validated by claiming the fact that the measures were taken towards limiting retail loans, and additional measures were taken to incentivise corporate and SME lending. While this is actually the case especially for the post 2014 period, the weak economic performance with high loan growth observation is still valid. Thus an analysis of (private) fixed investment expenditure and bank loans is needed.

2.2. Fixed Capital Formation

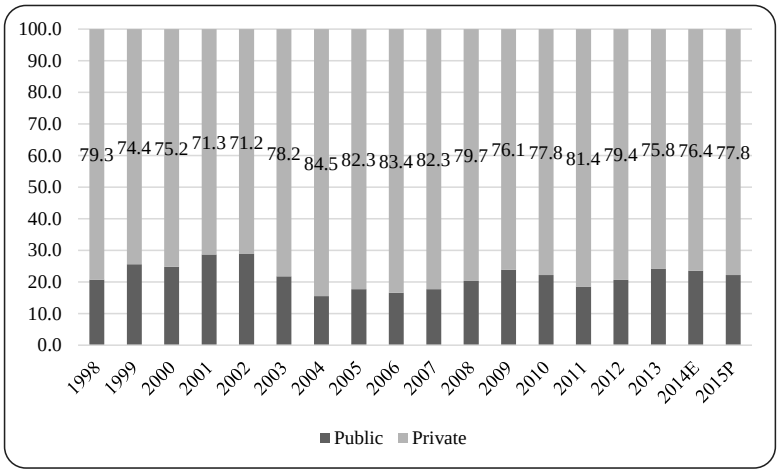
According to Ministry of Developments data, in 2000-2014 period, the share of total fixed capital formation in GDP has declined from 22% to 20%'lere, share of private fixed capital formation in GDP has declined from 18% to 16% özel sabit sermaye yatırımlarının payı ise %18'ler düzeyinden %16'lara gerilemiştir. While the share of private investment in total slightly rose during this period, this trend lost momentum by 2012 (confirming Özatay findings). Moreover, looking at sectoral break down of private investment, share of industry (manufacturing+mining+energy) diminished from 50%s to 45%.

Figure 4. Share of Fixed Investment in GDP and Sectoral Breakdown of Private Investment



Source: Ministry of Development

Figure 5. Share of Private Investment in Total Fixed Investment Expenditure



Source: Ministry of Development

One thing to keep in mind is that the share of private investment expenditure has always been high in Turkey. Thus, an inference about use of financial loans to investment to economic activity remains strong for a very extensive period. However share of private investment has remained subdued since 2011. This is also reflected in the public-private breakdown of total investment expenditure. The share of private investment has declined by 3 percentage points, since 2011

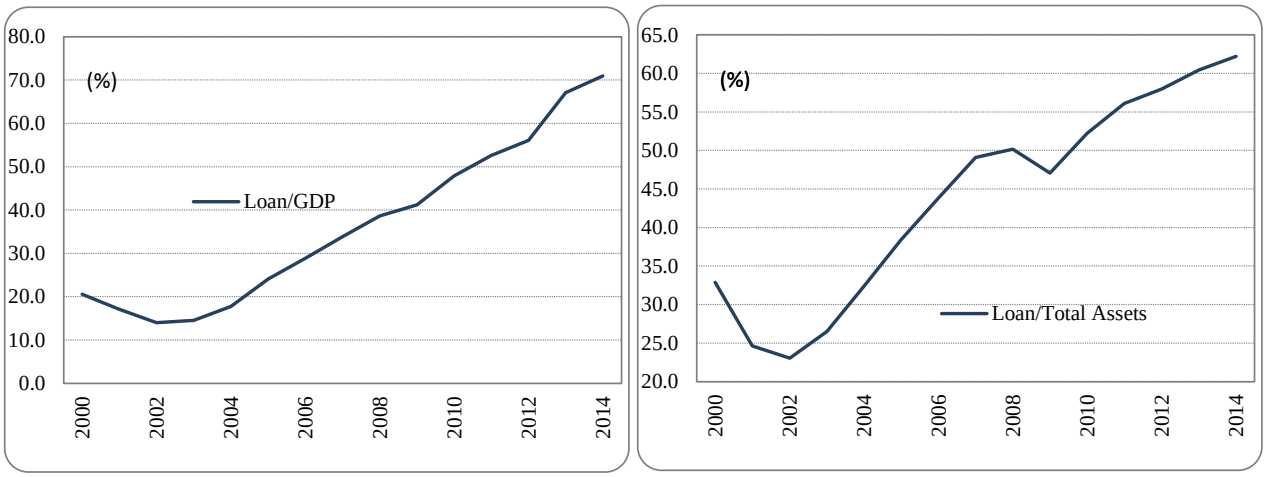
2.3. Weak Investment Issue

The weak investment problem is a highly common question asked by economist all around to find solutions to dismal growth. Growth is expected to be ignited by (re-gained) competitiveness and production of high value added product, which is assumed to be achived by innovation. Thus, innovation inducing investment areas such as high tech industry is a direct target for policy makers all around. However, in many economies first there is an issue of overall weak investment demand, and secondly a lack of investment demand towards "preferred" industries.

In a recent study by Banerjee, Kearns and Lombardi (2015) two main explanations are proposed for the overall weakness in business investment [despite low interest rates and widely accessible capital market funding].

The first is connected to the mismatch between favourable financial conditions and investment opportunities. Meaning that firms cannot access finance easily. When internal funds are not sufficient, external funding cannot be accessed. This explanation needs to be dwelled as in Turkish case, firms heavily rely on external funding as pointed out earlier, and considering shallow financial depth/ inclusion, this might be a main driver.

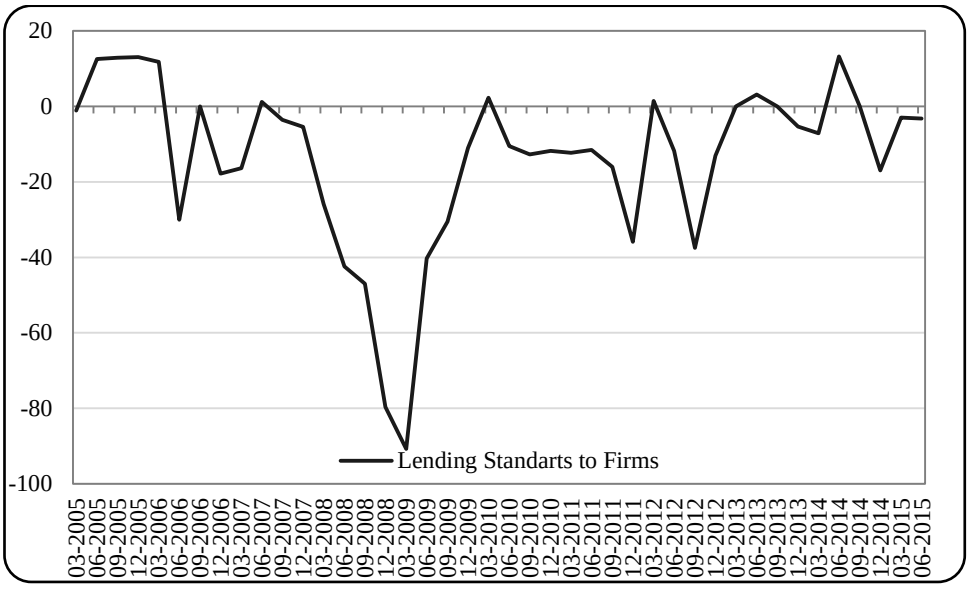
Figure 6. Bank Loan to GDP and Bank Loan to Total Assets



Source: BRSA

Nevertheless banking sector data lessens this argument for Turkey. Financial depth is increasing, firms are utilizing external finance through banks, and banks are allocating more funds to their loan portfolio [regardless of their responds to lending survey]. According to CBRT's lending survey to banks, lending standards to firms remain neutral, even though some tightened periods can be detected. However for the post 2011 period the standards have improved compared to global crisis period.

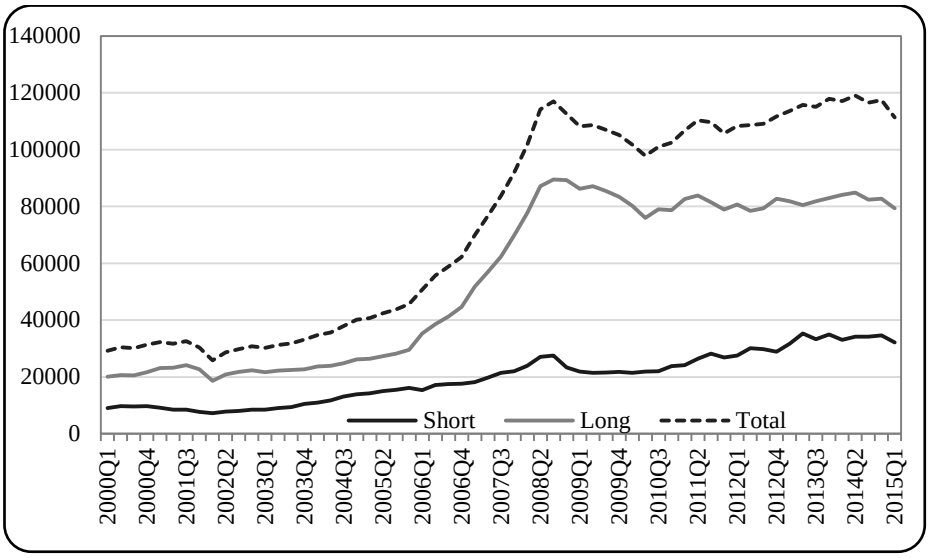
Figure 7. Lending Standards to Firms



Source: CBRT

Another source of external finance which is quite significant for Turkish corporate sector is foreign borrowing. There, we see a stalled situation. Since the global financial crisis, while Turkish banks had no difficulty in increasing their foreign borrowing, Turkish firms seems to at least keep their ground on long term borrowing with a slight increase in short term borrowing. The non financial private external debt stock rose from around 35 billion USD to 60 billion USD by 2006 and from there to 110 billion USD by 2009. Keepind a steady level since then.

Figure 8. Private Sector Foreign Debt Stock (million USD)

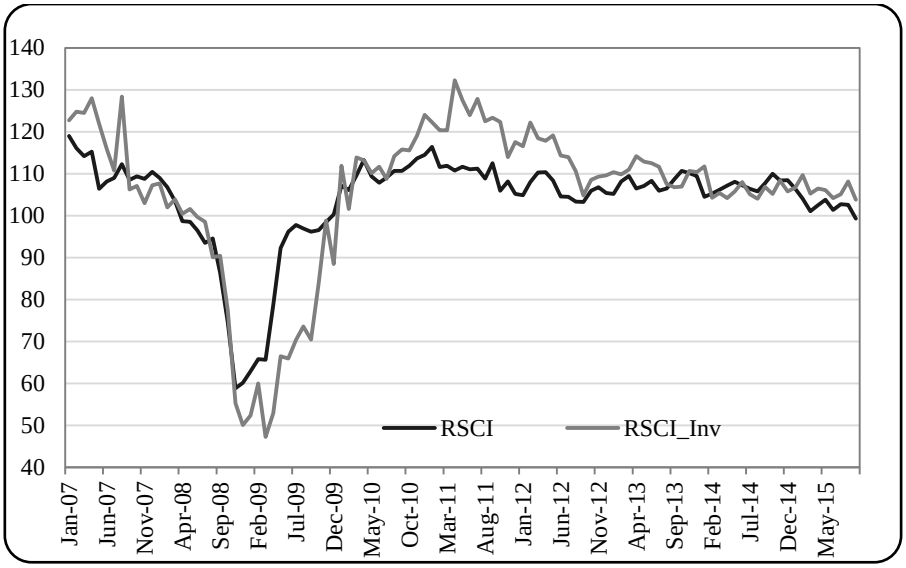


Source: Treasury, CBRT

A second, explanation is that even if firms do have funds to invest or access to external finance, the uncertainty about the future economic conditions, keeps the investment demand

weak. This explanation seem highly plausible for Turkish case that the investor confidence has been deteriorating since mid2011, despite picking up after the global financial crisis. Hence there is an issue of market sentiment of domestic economic agents.

Figure 9. Reel Sector Confidence Index and Investment Component

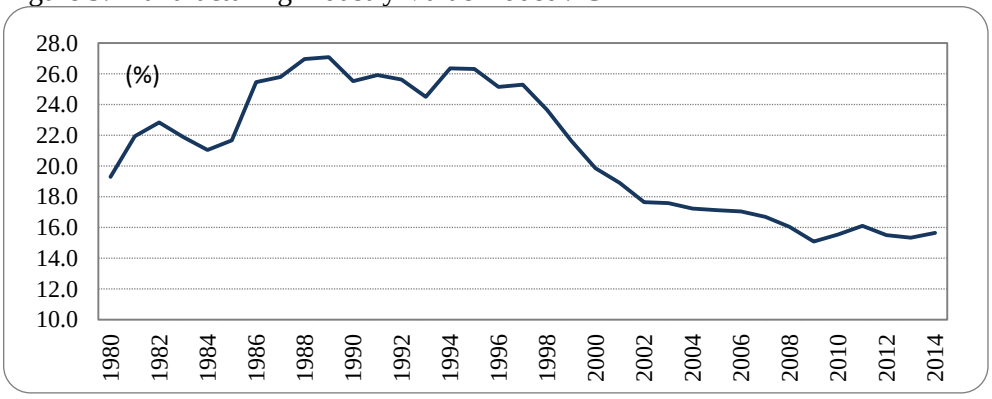


Source: CBRT

2.4. Sectoral Preference Issue

The 10th Five Year Development Plan of Turkey has a main growth strategy behind it. Publicly announced in 2014 for 2014-2018 period. The growth strategy is explained as "*The main strategy for high and stable growth is developing the private sector-led, open and competitive production structure. Increasing productivity and accelerating industrialization process are milestones of this strategy*". Thus the strategy relies on increased industrial production, hence capacity. So there is a need for increased investment expenditure in industry and manufacturing.

Figure 9. Manufacturing Industry Value Added / GDP



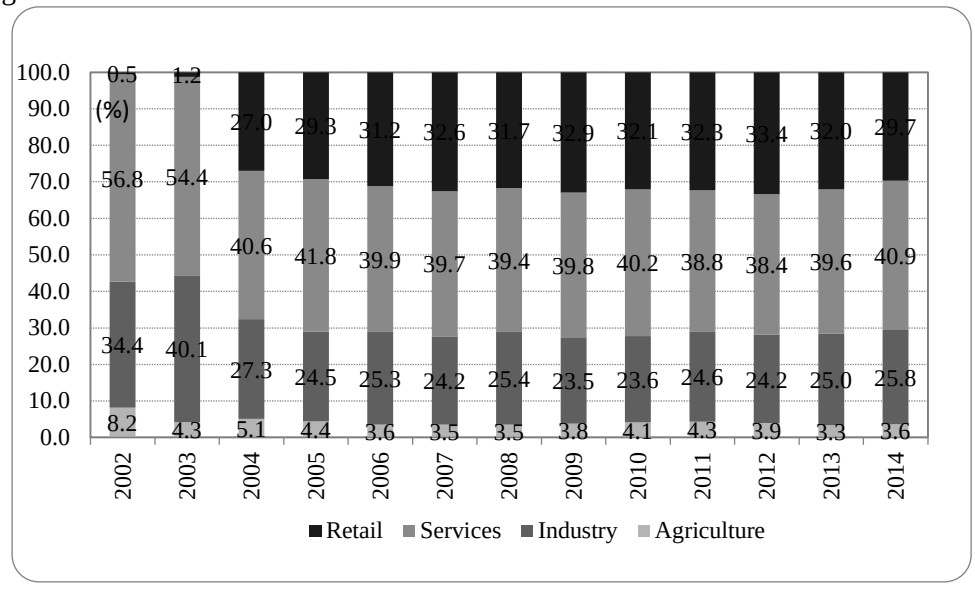
Source: SIS

Evidently national accounts displays a sharp decline in manufacturing industries value added share in GDP since year 2000. This can be attributed to impressive growth performance by the services sector, but ultimately, as of 2010s this fact threatens Turkish growth perspective as addressed in the development plan.

So, is the decline in weight of manufacturing and industrial value added matched with investment and loan demand for these sectors? As noted in previous section, the overall private investment expenditure is weak despite favourable or at least neutral conditions. Is there a further deterioration in "desired" sectors? A similar question is asked by Busetti, Giordano and Zevi (2015) for Italy. The main research findings are that the non-financial private services were the main driver of the decline in the aggregate investment rate, the reallocation of value added away from industry was a further drag on investment. Their survey findings, and aggregate model of investment indicates that even during the recent double recession the most important driver of capital accumulation was demand conditions. Finally, they claim "…uncertainty provided a sizeable drag on investment growth not only during the global financial crisis but also in the last two years".

Similar to Italy's situation, despite policy documents dictate, following the abrupt rşse in retail loans by 2003, share of loans to industry declined by around 10-15% points. The share of services sector with in total loans also displayed a similar fall, but that needs to be further analyzed.

Figure 10. Sectoral Breakdown of Total Loans

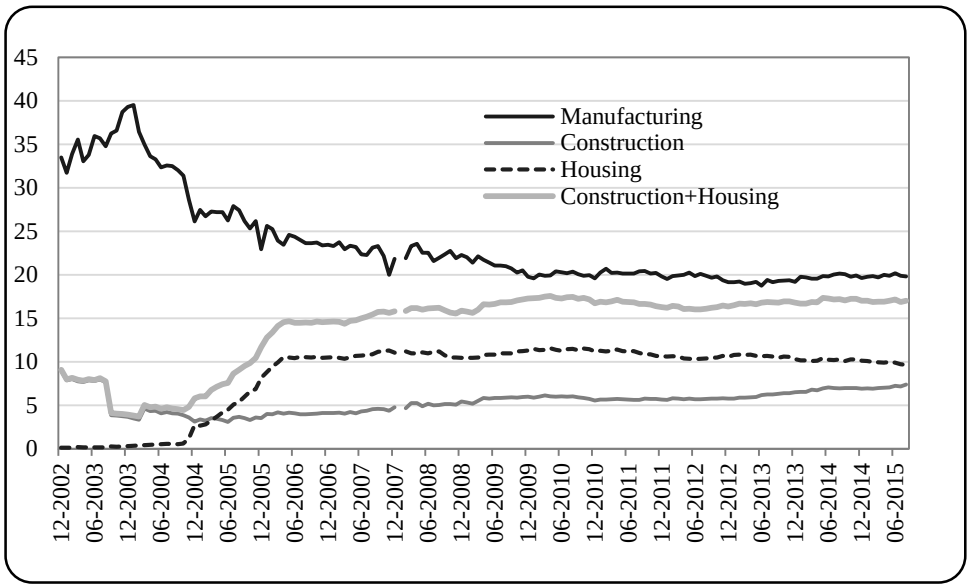


Source: BRSA

Looking at sub sectors with in industry and services, Turkish manufacturing industry and its value added coupled with a weakening investment preference for this sector, according to the banking data. Bank loans for manufacturing industry which around 30-35% in 2003 began to

decline significantly to almost 20% by 2009. And while the total services sectors share in total loans diminished, construction sub-sector became a power house, increasing its share by almost doubling previous levels. Moreover considering the mortgage segment of retail loans, that easily be linked to construction and dwelling, the preference towards construction and housing in expense of manufacturing can easily be seen.

Figure 11. Selected Sectoral Shares in Total Loans



Source: BRSA

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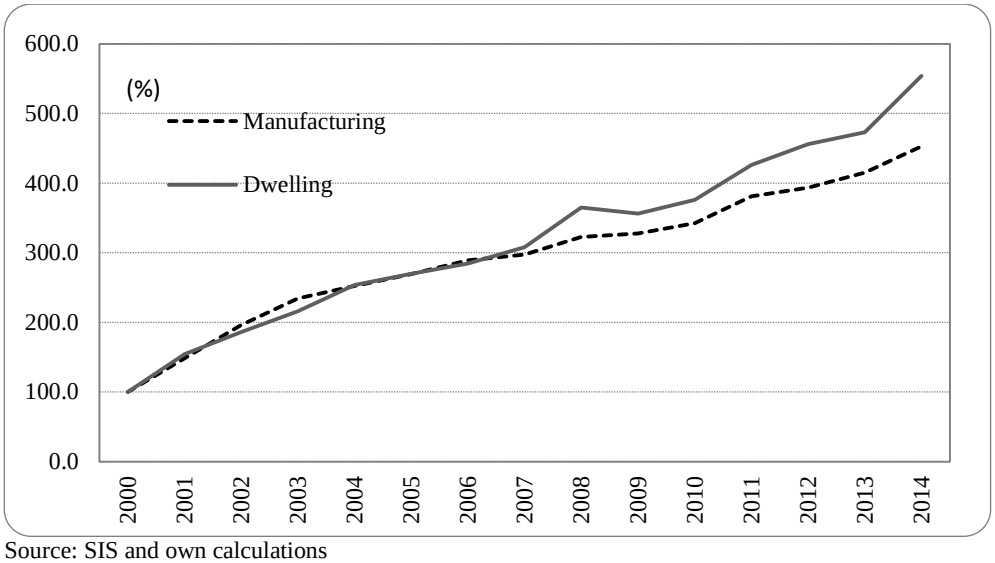

Source: SIS and own calculations

There is a single reason that might be an explanation of this explicit preference. That is relative price developments. Since 2000 the relative prices shifted in favour of construction (dwelling). Thus expected return to this sub sector is higher, luring investment propensity towards here. This may have also adversely effected future investment expenditure due to

irreversible land transformation (such as leaving all clustering and other positive externalities behind and further hindering expected returns for manufacturing)

3. CONCLUSIVE REMARKS

Share of manufacturing and investment in manufacturing industry have been declining for some time. Moreover, since there is an overall loss of appetite for investment in the private sector. However all major policy documents claim that Turkish economy may meet her target via a growth strategy focusing on high value added high technology embedded industries. Hence there is a significant need to reverse current trends and preferences. To do this the main drivers of the current situation needs to be discussed. This study merely points out two main points. First is that since 2003 there has been a shift in investor preference towards non-manufacturing industry, due changes in expected returns in cross sectoral domain. Second is that since 2011 there is an aggregate loss of appetite of investment in the private sector. As the external financing needs of the corporate sector heavily relies on bank lending and foreign borrowing, the worsening global conditions will eventually hit both of these external finance sources, since banks also rely on international capital flows as well. Hence in designing development policies all the possible drives of lack of investment and sectoral incentives must be evaluated rationally.

ACKNOWLEDGMENT

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REFERENCES

Balta, N. (2015) "Investment dynamics in the euro area since the crisis" *Quarterly Report on the Euro Area, Volume 14, No 1, 35-43*

Banerjee, Ryan and Kearns, Jonathan and Lombardi, Marco J., (Why) is Investment Weak? (March 2015). *BIS Quarterly Review March 2015*. Available at SSRN: http://ssrn.com/abstract=2580278

Barkbu, B., Berkmen, P., .Lukyantsau, P., Saksonovs, S., Schoelermann, H. (2015) Investment in the Euro Area: Why Has it Been Weak? (February 2015). *IMF Working Paper No. 15/32*. Available at SSRN: http://ssrn.com/abstract=2584383

BRSA, *Monthly Interactive Bulletin,* www.bddk.org.tr

CBRT, *Electronic Data Delivery System,* http://evds.tcmb.gov.tr/index_en.html

Chirinko, R. (1993), "Business fixed investment spending: modelling strategies, empirical results, and policy implications", Journal of Economic Literature, Vol.31, No.4, pp.1875–1911

ECB (2014) "Drivers and implications of the weakness of investment in the EU", *EU Economic Forecasts 2014 Autumn Box 1* http://ec.europa.eu/economy_finance/eu/forecasts/2014_autumn/box1_en.pdf

ISO, İstanbul Sanayi Odası (2015) *Alternatif Finansman Yöntemleri Semieri Özet Kitabı, 20* Jan 2015, http://www.iso.org.tr/sites/1/upload/files/alternatif-finansman-yontemleri-3949.pdf

Özatay, F. (2015). 2000'li Yıllarda Türkiye Ekonomisi. *İktisat, İşletme ve Finans 30(350) 2015, 09-24*

Turhan A, Sakarya B, Gokgoz, İ.H. (2014) *GSYH, Yatırım ve Kredi Analizi*, unpublished mimeo BRSA