

**dr. Bianka Parragh PhD**

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Óbuda University, Keleti Faculty of Business and Management,  
Institute of Business Management  
National University of Public Service,  
Faculty of Political Sciences and Public Administration,  
Research Institute of Public Finance

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## **On two successful programs for lending to SMEs in Hungary**

### **Summary:**

While we are discussing the decade that preceded economic stabilisation and the turn in economic policy in 2010, the improvement of the financial and economic situation of Hungarian small and medium-sized enterprises and the enhancement of their competitiveness keep remaining a goal to be achieved. The problems that domestic micro-, small and medium-sized enterprises face for decades originate from factors that prevent their growth and set the track of their growth in the one and a half decades that have passed since the change in the regime. The long-term effect of chronic under-financing that also weakens corporate competitiveness appeared in all levels of corporate operations. Along with EU accession, challenges grew larger and competitive conditions became harder, which trend was further intensified with the onset of the financial and economic crisis in 2008. It became a key issue for domestic enterprises to have financial resources and borrowing possibilities at their disposal in sufficient quantity and quality and their possibilities for development and their track of growth were not hindered.

**Keywords:** credit market, lending to SMEs, competitivenessgospodarcze

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### Introduction

The economy of Hungary, especially the companies in domestic ownership has been confronted with a number of challenges over the decades that have passed since the change in the regime, making an influence on economic growth with various intensity in different directions, whether positive or negative. The major macro-economic factors that determine the state of the national economy and their interrelation with public finances well illustrate the economic trends taking place in a given country<sup>1</sup>.

In Hungary the major part of the market transition was characterised by a twin deficit, which meant a deterioration of the balance figures, similarly to as it was in the 1970s, in the market economic transition, which came as a shock therapy. For the time being, the Bokros packet in 1995-96 and the accompanying hastily made, unreasonable privatisation decisions brought a brief improvement until 1997, however by 1998 the balance of the budget position slid back to an 8% GDP deficit level. Between 1998 and 2002 the public finances were in better shape, notwithstanding the current account deficit. Yet between 2002 and 2006 twin deficit characterised the balance of the Hungarian economy again<sup>2</sup>. Independent, small and

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<sup>1</sup> B. Parragh (2015): Conditions and Risks of Sustainability, Polgári Szemle, Issue 2015/4-6, p. 278

<sup>2</sup> The budgetary position showed a deficit between 6-10% of the GDP until 2006 and the current account balance showed a deficit of 6-8% of the GDP.

medium-sized enterprises in domestic ownership became interested in livelier import due to the long-term high level of artificial and balance base rates and interest rates. They could not take advantage of and benefit from the market advantages coming with EU accession, because they could not get ready for the challenges that the accession brought. Primarily foreign working capital was involved instead of domestic business developments and investments and the share of the Hungarian corporations in export remained at a low level. Basically in Hungary it was not the corporate sector that played the main role in the process of getting indebted, whereas in the southern euro zone group and Slovenia and Bulgaria exactly the opposite happened. In the first decade after the EU accession, the ratio of Hungarian corporate borrowings to the GDP moved between 20-30%, apart from a short-lived rise.

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### Effects of 2008 economic crisis on the credit market

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The global economic crisis that broke out in 2007 with carry-over effects on the macro-economic trends of Hungary in 2008 had exponential implications for our weakened economy, which was confronted with higher expectations and challenges from several aspects also in consequences of the EU accession<sup>3</sup>. The strict lending conditions of banks played a crucial role in the weakening competitiveness of the SME sector. The transactions that reflected the borrowing trends showed that SME borrowings fell back by 5-7% annually<sup>4</sup>.

The problem of banks' diminishing willingness to lend money was really underpinned by the narrowing lending capacity of parent banks, which forced Hungarian subsidiaries to restrain their lending activity. This was coupled with the problem of worsening lending conditions in comparison to the region, which evidently manifested itself in high lending rates<sup>5</sup> in contrast to countries in the region. In international comparison the difference in the conditions of financing possibilities proved to be a substantial competitive disadvantage for micro-, small and medium-sized enterprises in Hungary.

The classic requirement of economic policy is to stimulate economic growth, facilitate financial balances in the balance of payments of public finances and foreign trade, keep the inflation rate low and the ability to continuously carry through structural development reforms that improve the competitiveness of the national economy<sup>6</sup>.

Financial institutions considerably cut back their lending activity at the time of the financial and economic crisis in 2008, behind which first of all shrinking willingness to lend money can be identified, because based on their capabilities they could have lent money. Given the widening gap between the lending capacities and lending willingness of banks the banking system specific factors of lending substantially contributed to the cut-back of corporate lending at the time of the crisis. Figure 1 illustrates the changes in corporate lending between 2010 and 2018 Q2.

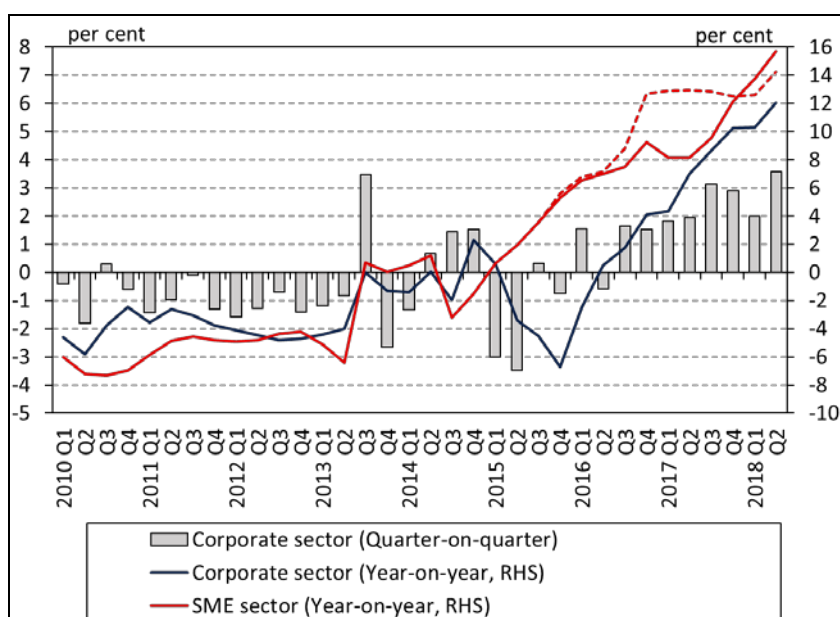
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<sup>3</sup> An excessive deficit procedure was in process against Hungary right from the moment of accession.

<sup>4</sup> G. Fábrián (2014): The Loan for Growth Program reversed the downward spiral of the shortage of funds, *Világgazdaság*, 14 May

<sup>5</sup> Based on ECB data: In the years following the crisis Hungarian enterprises could get loans over EUR 1 M at interest rates ranging between 6-14%, while regional competitors (in V4 circle) could get financing at 4-8%. In the case of borrowings below EUR 1 M Hungarian enterprises could get loans at interest rates ranging between 7-14%, while regional competitors (in V4 circle) could get financing at 4-8% rates.

<sup>6</sup> Cs. Lentner (2013): *Matters of Public Funds and the Science of Public Finances*, NKTK, p. 78



**Figure 1: Growth rate of loans outstanding of the total corporate sector and the SME sector**

Note: Transaction based, prior to 2015 Q4 data for SMEs are estimated based on banking system data.

Source: MNB, 2018.

Lending conditions became extremely strict, supply of funds became limited. Past information problems (high NPLs) combined with the low risk appetite prompted banks to become more risk averse. The decline was most prominent in SME lending, which is a pillar of sustainable economic growth. The pace of growth of corporate and SME lending significantly sank<sup>7</sup>. The massive cut-down of lending that started from 2009 was successfully broken by the Loan for Growth Program from 2013. Due to the dynamic expansion of corporate lending over the past one year the volume of loans to non-financial companies grew by more than 750 billion forints on a transaction basis, which is equivalent to 12.1 percent annual expansion (Figure 1)<sup>8</sup>.

Over the past 25 years since the change in the regime, the Hungarian budget did not in general facilitate sustainable growth. Its main reason was that the budget was not in a position to meet the stability requirement<sup>9</sup>. The Hungarian system could successfully operate not only by reason of its strict requirements, simple and transparent guidelines that focus on the fight against state indebtedness and powerful authorisations given to guard compliance with the principles, but also thanks to its solutions that peculiarly fitted into the European practice, its mitigating effect on excessive spending, its power to change attitudes and create trust and its durability<sup>10</sup>. It is essential that it promotes the stability and sustainable growth of the Hungarian economy and intensification of its competitiveness and helps social uplift. Therefore the new approach to economic policy built on new values must necessarily be reflected in the fiscal and monetary policy. The innovative monetary policy that did away with the features of caution and the harmony of the fiscal and monetary policy that could ultimately be achieved in 2013 through the turn in the monetary policy led to results and brought recognition internationally.

In consequence of the 2008 economic crisis substantial lack of trust and liquidity was typical among corporations and households.

<sup>7</sup> 4-6% plunge was typical annually.

<sup>8</sup> Lending processes, MNB, August 2018.

<sup>9</sup> J. Ádám – D. Berta – Zs. Lovas – G. P. Kiss (2016): Effect of fiscal policy on economic performance, D. Palotai – B. Virág (2016): Competitiveness and growth, Hungarian National Bank, p. 537

<sup>10</sup> Á. Kovács (2016): Rule-based budget: Road to budgetary stability – The Hungarian solution, *Polgári Szemle*, Volume 12, issue 2016/4-6

### **Bottom point of social trust**

In the years following the crisis business trust wavered, then as the crisis deepened, it hit the bottom just as social trust in the government, state institutions and the bank system. In 2008 in Hungary social trust in the government and state institutions merely reached 13% according to EU surveys. Five year later, based on a 2013 Eurobarometer survey the public had more trust in the government in comparison to the EU and regional averages, as social trust rose to 37% well above the 23% EU average, then by 2017 it went up to 48% in Hungary, which exceeds 36% EU average.

Covey and Merrill, American economists (2008) drew attention to the significance of trust: "if trust goes down, costs go up, while extending trust brings enormous benefits".

Trust has a positive impact on the everyday functioning of the society, has a stabilising force, fosters business trust, stimulates economy, which also manifests itself in efficiency and productivity enhancing developments. The existence or lack of trust influences our everyday decision, our future plans, whether it comes to trends affecting individuals, families, communities, organisations, corporations, markets industries or the society.

### **Information asymmetry in lending**

The appearance of information asymmetry in lending and banking can lead to the emergence of new risks, as the real credit quality or credit risk are not entirely discernible for lenders. If the market players' knowledge is incomplete, the information they have gathered is far from being comprehensive, and transactional costs of accessing information are substantial and make the process of getting information cumbersome, then an asymmetric information situation arises. So one party has more and better information than the other. The information asymmetry badly distorts and damages the efficiency and output of the operation of the markets.

The professional literature on information economy distinguishes two cases of information asymmetry: adverse selection and moral hazard. Adverse selection expresses the consequence of hidden and false information, while moral hazard means the hidden motivation not recognised earlier, which takes shape after selection. Adverse selection occurs when one party (e.g. the buyer of a car, an assessor of loan applications, employer or elector) is not able to recognise an important characteristic (readiness, real motivation or honesty) of the other party (e.g. used car dealer, loan applicant, employee or political candidate). Therefore under the circumstances of asymmetric information the former can fall victim to deceptive or misleading behaviour of the latter. This triggers the mechanism of adverse selection. honest and well-meaning used car dealers, honest loan applicants, reliable employees, honest politicians disappear from the scene<sup>11</sup>. In order to fend off adverse selection Stiglitz used the term of "screening" for the first time<sup>12</sup>. By analysing the distortion effect of information asymmetry typical of the insurance market, Stiglitz modeled a market where insurers do not have adequate information on the real risk situation of their clients and try to reduce the risk by filtering potential customers. Accordingly, buyers can filter sellers with a quotation that forces them to reveal their true colors. In any case, too low price quotations may be suspicious.

### **The credit crunch phenomenon**

It pushed up the financing risk of lending that the smallest companies that were indebted in foreign currency had no export income, which would have provided a base for predictability and calculability.

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<sup>11</sup> Z. Szántó (2009): Adverse selection and moral hazard in politics, *Közgazdasági Szemle*, Volume LVI, p. 565

<sup>12</sup> J. Stiglitz (1977): Monopoly, Nonlinear Pricing and Imperfect Information: The insurance market. *Review of Economic Studies*, 44. p 407–430

The dramatic fall in loans provided by banks to economic players – in other words the credit crunch proved to persist in the long term. The credit crunch phase characterised the Hungarian economy between 2009 and the first half of 2013, which period was protracted and meant that the competitiveness of domestic enterprises lagged well behind the competitiveness of regional enterprises. As shown by transactions that reflected the lending trends – difference between utilisations and repayments – the SME borrowings fell by 5-7% annually<sup>13</sup>. The Loan for Growth Program stopped the deterioration of the adverse credit market conditions that originated from the shrinking willingness of banks to lend and became greatly successful in a few months. Between 2010 and 2012 as a result of structural reforms, Hungary managed to catch up with regional competitors as far as the balance of public finances, state indebtedness, employment and unemployment were concerned.

## Two successful programs for stimulating the credit market

### Effects of the Loan for Growth Program on the credit market

Against the decline in SME lending, the Loan for Growth Program was the first instrument of the central bank aimed at restoring the functioning of the SME credit market, and finally at boosting economic growth by easing access to credit. The Loan for Growth Program brought significant improvements in credit market opportunities and stopped the 4-6% decline in corporate borrowings from quarter to quarter in the SME sector. The objective of borrowing was to boost investment, finance working capital, pre-finance EU grants and replace outstanding loans (up to 10% in the second phase). So The Loan for Growth Program was not intended as a substitute for, but as a supplement to market loans.

The Loan for Growth Program significantly improved lending conditions for the SME sector and supported growth. It has also been provided to health related and sport related organizations of appropriate size and structure which is another attractive area of development (12b).

The most important features of the Loan for Growth Program are shown in Figure 2.

First phase of the LfG Program (HUF 701 billion)	Second phase of the LfG Program (HUF 1425 billion)	Third phase of the LfG Program (HUF 600 billion)
✓ Loan replacements eased the interest burdens on enterprises.	✓ Investment loans that most of all facilitate economic growth in focus	✓ Targeted only to implement investments
✓ SMEs less exposed to exchange rate changes	✓ Every second investment loan below HUF 10 million	✓ Favourable foreign currency financing also available
✓ Intensifying competition between banks.	✓ Greater share of micro enterprises	✓ Supplementing EU funds
✓ Substantial volume of new investment loans as well	✓ Gradually decreasing regional concentration	✓ Lower maximum loan amount increases the number of smaller market players.

Nearly 40,000 enterprises got financing in an amount of approximately HUF 2800 billion.

This accounted for 2% of the economic growth between 2013 and 2016.

**Figure 2: Summary characteristics and results of the Growth Loan Program**

Source: own study

### Széchenyi card and the past 15 years – one and a half decades of a success story

While due to the 2008-2009 financial and economic crisis banks' willingness to lend dropped, the demand for Széchenyi cards, which helped enterprises, jumped by 30 percent. The placement of micro-loans came to a sudden stop and the market kept on shrinking. The trend of providing mortgage-

<sup>12</sup>b. Chaudhuri S: Sport Sector and its Sources of Sustainable Competitive Advantage, STUDIA SPORTIVA 9: (1) pp. 172-177.(2015)

<sup>13</sup>G. Fábrián (2014): The Loan for Growth Program reversed the downward spiral of the shortage of funds, Világgazdaság, 14 May

backed loans slowed down, came to a halt and became substantially more expensive. Both in corporate and retail sphere there was a loss of trust in the government and economic policy in the years of the crisis. Market disruptions, decline in demand and recession were common. There was a strong demand for funding arrangements that could be utilised in the short term. Micro- and small enterprises needed urgent financial help.

### **Necessity for the Széchenyi Card Program**

KAVOSZ Zrt. launched the Széchenyi Card Program<sup>14</sup> back in 2002 before 2010, which brought a turn in economic policy, in order to improve the financing possibilities of domestic micro-, small and medium-sized enterprises. In 2001 a basic expectation about the program was that the SME sector could have fast and cheap access to funding. The introduction of the program was also supported by the then prime minister, Viktor Orbán and György Matolcsy. The Széchenyi Card Program was implemented through the cooperation of the Hungarian Chamber of Commerce and Industry led by László Parragh and the National Alliance of Entrepreneurs and Employers. The first Széchenyi Card was handed over in 2002. Beforehand there were meagre resources available to enterprises in the SME sector for working capital financing or bridge transitional liquidity problems. It is important that the innovative and flexible financing structure, as a concept, met a number of needs and responded to a number of challenges.

Grounds for the novelty and uniqueness of the Széchenyi Card:

- state interest subsidy,
- joint guarantee undertaking and aid for the guarantee fee,
- earlier unprecedented cooperation between the state, credit institutions, commercial alliances, organisations of structure interest representation and public bodies,
- setting up an entrepreneur-friendly structure other than customary course of business in banks,
- adjustment of the conditions for application to the peculiarities of the Hungarian SME sector,
- providing state interest subsidy and aid to the guarantee fee in order to ease the burdens of enterprises.

It is also an important advantage of the Széchenyi Card Program that the process of credit rating and the execution of the agreement substantially shortened, offering enterprise-friendly solutions different from customary banking procedures back at the beginning of 2000s. For the Széchenyi Card Scheme, from the beginning the Government provides subsidies to interest and suretyship fees to ease the credit burdens of enterprises. Milestones of the Széchenyi Card Scheme and the Széchenyi Card Program in operation from 2010:

- 2003: introduction of HUF 5 million credit facility,
- 2004: introduction of HUF 10 million credit facility,
- 2006: introduction of HUF 25 million credit facility,
- 2010: introduction of the Széchenyi working capital and investment loan,
- 2011: Introduction of Agricultural Széchenyi Card, extending the program to agriculture,
- 2012: Széchenyi loan to supplement equity and advance subsidy as a means to facilitate tendering for aids,
- 2015: introduction of HUF 50 million credit facility in the framework of the Széchenyi Card and Agricultural Széchenyi Card overdraft facilities,

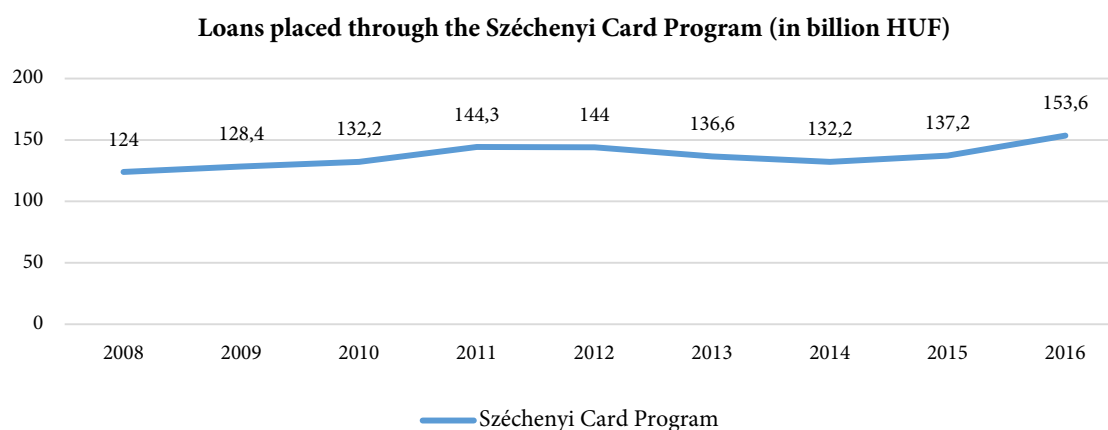
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<sup>14</sup> The group of distributors of the loan products of the Széchenyi Card Program continually expanded, at the moment OTP Bank, Erste Bank, MKB Bank, the Saving Bank [Takarékbank], Sberbank, Gránit Bank, UniCreditBank, Budapest Bank, Raiffeisen Bank are taking part in the sale of loan products.

- 2016: the introduction of HUF 50 million credit facility in the framework of the Széchenyi working capital loans,
- 2017: introduction of HUF 100 million credit facility.

### Facts and Achievements

From 2002 the Széchenyi Card Program offers a partial solution for the need for funds of the Hungarian micro-, small and medium-sized enterprises arising out of the peculiarities and shortcomings of their operations, which has also been supported by all governments over the past 15 years. Subsidisation continued to expand during the time while György Matolcsy held the office of the minister of national economy, especially not only from 2010, but also during the 5-6 years' time interval of the credit crunch. From the realisation of the turn in the economic policy in 2010, it functioned as an alternative to the financial problems of the said group of enterprises, in which György Matolcsy's professional support was palpable all along, just as the launch of the Agricultural Széchenyi Card also enjoyed György Matolcsy's professional support. From 2013 by launching the Loan for Growth Program, the National Bank of Hungary set up a structure with monetary historical importance under the leadership of György Matolcsy, governor of the bank of issue. With the launch of the Loan for Growth Program the scarcity of loan, what is more, the steadily negative spiral of the credit crunch could vanished within months. As for amounts, the Széchenyi Card accounted for a smaller volume of credit placements, however it was a quick financial help to micro-enterprises thanks to its lending structure. "The Loan for Growth Program does not drive out other programs ... from the start, the Széchenyi Card Program offers loans customised to the funding needs of small enterprises – and it does not compete with, but complements the Loan for Growth Program – thus smaller enterprises who are ousted from the program of the bank of issue"<sup>15</sup>. The popularity and significance of the Széchenyi Card Program were justified by the state subsidisation existing from the moment of its onset<sup>16</sup>.



**Figure 3: Corporate loans placed in the framework of the Széchenyi Card Program from the period of the financial and economic crisis until 2016**

Source: My own edition based on the data of KAVOSZ Zrt., 2016.

<sup>15</sup> L. Krisán (2015): There is Need for Coordinated State Programs, *Heti válasz*

<sup>16</sup> The Széchenyi Card scheme was expanded into a program upon the introduction of working capital financing loans and investment loans, enabling enterprises to take advantage of an arrangement that is the most appropriate to the implementations of their various financing goals. With the support of the Ministry of Regional Development the Agricultural Széchenyi Card was launched as an expansion of the Széchenyi Card Program to the agricultural sector from 1 September 2011. From the spring of 2012 two new products that help enterprises applying for EU grants, the Széchenyi Equity Supplement Loan and Széchenyi Aid Advancing Loan are also available to enterprises.

Figure 3 illustrates well that in great volume loans were placed in 2011 and in 2012 in the framework of the Széchenyi Card Program, in the near credit crunch situation and from 2013 this though narrowed down when the Loan for Growth Program was launched, however, it was on the rise again in 2015. Changes in the volume for the need for corporate loans reflect the positive expectations of Hungarian micro-, small and medium-sized enterprises, their readiness to take out loans and an increasing demand for loans, especially from 2010.

The number of Széchenyi Cards granted in the period between 2007 and 2015 shows an upward trend. In 2007 19,196 Széchenyi Cards were issued, coupled with loans placed over HUF 127 billion, while in 2015 15,855 Széchenyi Cards were issued with loans placed over HUF 137 billion<sup>17</sup>. So from the perspective of the number of issued cards the fall is 17%, while from the perspective of the amounts borrowed the Széchenyi Card Program realised 8% growth. There were about 320,000 loan applications and 250,000 borrowing transactions executed, in the framework of which the actual lending exceeded HUF 1,696 billion at the end of Q3 of 2017.

### **Inter-relations between the Loan for Growth Program and the Széchenyi Card Program**

In the framework of the Loan for Growth Program loans could be applied for in the amount ranging from HUF 3 million to HUF 3 billion, the term was maximum 10 years, but it could mature within or over a year. In the Széchenyi Card Program the upper limit for the amounts borrowed is HUF 100 million<sup>18</sup>, save for working capital loans, in which case it can be a maximum of HUF 10 million. In respect of the term most enterprises seek short-term borrowing arrangements, but arrangements for medium and, by now, long-term financing were also available in the market in 2016 (for minimum 1 year, maximum 60 months) or, in the event of investment loans, 120 months). According to the analysis made by the National Bank of Hungary in relation to the launch of the Loan for Growth Program Plus, any undertaking that could not obtain long-term loans in the framework of the Loan for Growth Program had rather low chances to take out such kind of a loan in the market, at a higher margin<sup>19</sup>. It is important to point out that the chain of economic shocks, the worsening of the recession, the trend of excessive borrowing that became global prompted some company managers to act with due care, in some cases, with excessive care as far as their attitude to borrowing is concerned.

The positive expectations that enterprises seem to have and the process of strengthening confidence in future especially drew attention to the necessity of the Loan for Growth Program and likewise to the need for the Széchenyi Card Program. On the other hand it was basically indispensable to stop the negative trend, which made it impossible to procrastinate taking action against the credit crunch.

When developing its monetary policy, the National Bank of Hungary has been applying an innovative approach and fruitful strategy until today in the period starting from 2013, which is also evidenced by the most recent factual data.

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### Conclusions and the future

The positive results of the past one and a half decades evidence and provide good grounds for the continued operation of the Széchenyi Card Program in the future. The turn in the economic policy built on new values that started in 2010 and triggered the 2013 turn in the monetary policy and the 2010 turn in the fiscal policy played a key role in the stabilisation of the economy, however, the results of the turn in the economic policy and the positive effect it made on the real economy started to reach their full

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<sup>17</sup> My own editing based on the data of KAVOSZ, 2016

<sup>18</sup> From 2017

<sup>19</sup> National Bank of Hungary (2016): What justifies the launch of the Loan for Growth Program Plus?



potential with the harmony of the fiscal and monetary policy that was associated with the turn in the economic policy that could be realised from 2013.

In respect of economic stability Hungary achieved considerable success by 2013, prices became stable and the financial stability was sustainably strengthened. By today it has become possible to ensure sustainable growth, development and ultimately to succeed in following the lead sustainably within the constraints of competitiveness of the national economy. It has become a key issue in both the corporate and state dimensions to respond to the challenges brought by the development related to Industry 4.1 and technological advancement. It has become necessary to continue – often develop or give more flexibility to – further measures that have given effect on the part of the state and successful programs of the past decade which help to utilise the possibilities of economic upswing that are palpable in the present macro-economic environment in as wide a scope as possible and trigger an effect that boost innovation and expand investments among the micro-, small and medium-sized companies. These effects can enliven healthy competition regarding margins and lending conditions.

The strengthening of the results and success so far achieved and keeping on the right track will have a decisive role from the perspective of the competitiveness of the micro-, small and medium-sized enterprises in Hungary in the future as well.

### Applied Literature:

- J. Ádám – D. Berta – Zs. Lovas – G. P. Kiss (2016): Effect of fiscal policy on economic performance, D. Palotai – B. Virág (2016): Competitiveness and growth, Hungarian National Bank, p. 537
- Chaudhuri S: Sport Sector and its Sources of Sustainable Competitive Advantage, *STUDIA SPORTIVA* 9: (1) pp. 172-177.(2015)
- G. Fábrián (2014): The Loan for Growth Program reversed the downward spiral of the shortage of funds, *Világgazdaság*, 14 May
- Á. Kovács (2016): Rule-based budget: Road to budgetary stability – The Hungarian solution, *Polgári Szemle*, Volume 12, issue 2016/4-6
- L. Krisán (2015): There is Need for Coordinated State Programs, *Heti válasz*
- Cs. Lentner (2013): Matters of Public Funds and the Science of Public Finances, *NKTK*, p. 78
- National Bank of Hungary (2016): What justifies the launch of the Loan for Growth Program Plus?
- National Bank of Hungary (2018): Lending processes, August 2018
- Gy. Matolcsy (2015): Balance and Growth, Kairosz Publishing House
- M. Nagy (2015): Role of the Loan for Growth Program in avoiding credit crunch and reinvigorating economic growth, *Polgári Szemle*, year 11, issue 1-3
- B. Parragh (2014): Conditions and Risks of Sustainability, *Polgári Szemle*, *Economic and Academic Journal*, issue 2015/4-6
- M. Patai - László Parragh - Csaba Lentner (2015): Hungary in the Changing World, *Éghajlat Kiadó* [Climate Publishing House]
- J. Stiglitz (1977): Monopoly, Nonlinear Pricing and Imperfect Information: The insurance market. *Review of Economic Studies*, 44. p 407–430
- Z. Szántó (2009): Adverse selection and moral hazard in politics, *Közgazdasági Szemle*, Volume LVI, p. 565