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Original Paper

Incentive Elements of Household Savings in the Hungarian Tax System

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Abstract

Of the regulatory systems, the tax system is one of the most important instruments for the government to encourage savings. Although tax systems are relatively stable, in fact, they are constantly changing. Taxes and their rates, as well as changes in other factors, serve to implement different tax policies. The primary purpose of the tax system is to redistribute income and enforce fairness to achieve effective results. Changes in tax laws can influence long-term savings decisions either positively or negatively.

I analized the incentive elements of household savings in the Hungarian tax system which applicable today and the discounts that could be used in the past. I collected other discounts which has contact with tax system and helps long term savings.

The Hungarian state offers three possibilities of self-help for pension purposes in the personal income tax system, which are voluntary pension fund, retirement savings account and pension insurance. I compared these possibilities and analized by different point of views. Furthermore, they support health insurance and mutual funds, from 2014 onwards the government merged the discounts. In my opinion, governments play an important role in creating economic prosperity in countries.

Keywords

household savings, personal income tax, pension fund, health insurance fund, mutual fund

1. Introduction

Savings, that is, income which is not spent on purchasing products and services for current consumption, can be studied in many ways. Economists deal with this issue a lot because savings are the basis for investments in the economy. These can be created in different sectors of macroeconomics, including households and companies, but in this study only household savings have been dealt with. Savings are important from both microeconomic and macroeconomic considerations because, on the one hand, the decision of households on how much they spend on consumption in the present and postponed to their future consumption, namely how much they save is of microeconomic nature, and from this approach it is aimed at the individual behaviour of decision-makers. On the other hand, it is also important from macroeconomic aspects, since household decisions have a long-term and short-term impact on the economy as a whole.

Economic and social processes, changes, and globalization have an impact on households, including individuals. Changes in the social, economic environment and, in turn, the needs of individuals are also transforming. According to some research, the conscious use of money nowadays plays a major role in the thinking of ordinary people (Csiszárik-Kocsir et al., 2016). Nowadays, for people in developed societies it is less and less important to accumulate material goods. Instead, they focus on leisure time and gaining experience. With this, the considerations, modes and factors influencing the savings are also changing.

In addition to typing consumer habits, it is also important to know how these groups can be influenced, how they can be shaped, and in what direction these skills are channelled. Typing of financial preferences in the field of education can also be used to differentiate the transfer of knowledge of this subject (Bakos-Tóth & Baranyi, 2016).

Having the domestic situation analysed we have to be faced with the fact that the majority of the Hungarian households do not have any savings. On the other hand they have a meaningful amount of loans and its ratio to the household’s net income is quite high in percentage (Tatay, Vágyi, & Varga, 2011).

In the case of savings, government interventions are justified if the income generation the market is unequal. According to Földvari (2009), between 1928 and 1942, even more income inequalities were generated in Hungary than in the United States as a result of the great economic crisis. The Gini coefficient was used to estimate the distribution of income. Some economics schools agree that redistribution of income is needed in society, but there are differences of view in the extent and in the way (Nemec & Wright, 2000). Each government has a decisive role to play in developing a good regulatory system to stimulate savings and achieve economic growth (Hussein & Thirlwall, 1999).

2. The Relationship between Savings and the Tax System

Of the regulatory systems, the tax system is one of the most important instruments for the government to encourage savings. Benjamin Franklin (1789), in the words known to “many, In this world nothing can be said to be certain except for death and taxes”. Tax is enforced monetary service that is executed by a state or an organisation under a given law, specifying its extent, terms of payment and due date. Although tax systems are relatively stable, in fact, they are constantly changing. Taxes and their rates, as well as changes in other factors, serve to implement different tax policies. The purpose of tax policy is to finance some government functions (Vígvári, 2008). Generally, in developed countries, the state taxes in three areas: income, consumption, and wealth taxation. Governments play an important role in creating economic prosperity in countries. For example, in the area of health care, education and housing, it is possible to influence the quality of life of households (Stiglitz, 2008). Basically, the tax system means a transfer made by the state from the enterprises, and the state transfers it back to households to support the objectives listed above.

Government policy can also influence household savings. For example, the state encourages retirement savings by benefiting from taxation on retirement savings (Mankiw, 2005). Savings depend on income. Income, however, is a cost to businesses that greatly affect their effectiveness. In order to provide the workers with proper and acceptable salaries, supplementary benefits are added to earnings. Non-wage benefits are also influenced by government tax policies (Ambrus & Kaufman, 2011).

The efficiency of each step of the fiscal policy depends on the time horizon, i.e., how long it will prove to be lasting (Simon, 2002). The government has to influence the financial system so that the savings opportunities are quite varied. The government needs to support the increase of savings as it is the key to economic growth (Labri, 2013). Our long-term self-care has always been important, but at a time of economic and financial crisis, it requires special attention (Horváthné, 2014). According to Halpern et al. (2004), economic policy measures can have long-term effects as the measures have long-term effects on the taxpayer's response (Vörös, 2011).

Changes in tax laws can influence long-term savings decisions either positively or negatively. The primary purpose of the tax system is to redistribute income and enforce fairness to achieve effective results. In the "Wealth of Nations" (Smith, 1776), Smith writes that taxation requires four principles to be respected. Individuals should contribute to government spending in proportion to their own capabilities; the tax to be paid is not arbitrary but obligatory and unambiguous; the tax is to be paid by the taxpayer in the most appropriate time and manner; as well as the tax should go along with the lowest possible burden for the taxpayer and the greatest possible gains for the budget (Nemec & Wright, 2000).

In relation to the savings generated by the population the personal income tax (in Hungarian SZJA) and the discounts available there will be presented. Hungary introduced a personal income tax in 1988, with which the state wanted to enforce the principle of fair tax burden. There was already a personal income tax before, this was in fact a re-introduction after a long skip. The subject of the tax is not the family, unlike in the tax systems of other nations, but the individual. Due to income redistribution, it helps to reduce income differentials. It can provide a fair distribution of burden as many tax allowances and exemptions can be incorporated into the system. Thus, it can be an effective means of achieving economic and social policy goals (Bozsik & Fellegi, 2010). According to Saavedra (2007) it is important to simplify and make the tax system transparent. In this way, the flat rate tax system and the abolition of allowances can assist a lot. According to Carone et al. (2007) tax revenue should be provided that it would still be worthwhile to work at the given level of taxes, which means proposing a reduction in the highest rates that will encourage employment. The aging of the population also calls for the development of a comprehensive strategy in the field of taxation (Hortáthné, 2014).

With the aging of the population and increase of the burdens of the working age population, inter-generational transfers must be re-negotiated (Brockdorff, 2012). If excessive progressive tax rates appear in personal income taxation, it leads to a decrease in performance, as the individual works more and earns less and is therefore less willing to sacrifice his spare time by undertaking further work. The link between tax rates and tax revenue is illustrated by the Laffer curve (Bozsik & Fellegi, 2010).

The direct effect of taxation is the withdrawal of income. The behaviour of economic operators is affected by the tax laws on individuals and their changes. In many cases, taxpayers make the decision based on the tax consequences of each option. The taxation system for long-term savings and other investment opportunities is also based on such effects (Végvári, 2008).

According to Erdős (2006), the willingness to save is greater for people with higher incomes if their tax payment obligations are lower. A good tax system is fair, does not curb individual performance, helps the economy to develop smoothly, and is not too complex but enough to cover public spending (Hetényi, 2000). Taxation or tax exemption on savings is a sensitive tax policy. The application of tax incentives and tax exemptions is also an important tax policy, but the effects of taxation are very complex and difficult to measure.

For those with taxable income, tax relief and, of course, those who can actually use it means a great benefit. In fact, the state does not support all taxpayers on a unified basis, only those who are willing to act in accordance with economic policy goals such as self-care for their retirement years, the prevention and preservation of their health.

The benefits to the personal income tax system usually take two factors into account; the social status and the family background of the taxpayer. Tax reliefs can be divided into two groups, which can be general and exceptional. The general tax relief is available to all taxpayers who meet the condition and are independent of the taxpayer's expense. Exceptional tax relief, however, depends actual expenditure, and is generally limited. This tax incentive always encourages some kind of taxpayer behaviour (Nemec & Wright, 2000). Tax incentives that stimulate savings can also be included. Changes in tax incentives and their decreases have a negative impact, as it creates an unforeseeable situation when making long-term financial and savings decisions.

People with financial knowledge generally save more and achieve higher returns on their investments (Bodie, Merton, & Cleeton, 2011). The success of tax policy depends on the development of society and the moral norms (Bozsik & Fellegi, 2010).

Tax policy has its impact on the economy as a whole. With the help of the tax allowance, in the form of a tax refund, the government seeks to achieve its strategic goal, thereby changing the attitudes and economic behaviour of taxpayers (Epley & Gneezy, 2007).

Currently, in Hungary, the savings are helped in three different forms.

3. The Provisions of the Personal Income Tax Act Related to Household Savings

Significant changes have been observed in recent years with Act CXVII of 1995. In the 1990s, taxpayers had a significant number of tax benefits, many of which were related to savings. Nowadays, they have been transformed and the provision is linked from the tax to the legal title. In this chapter, this change is presented together with how domestic savings are currently being stimulated by the Hungarian state. First, opportunities still applicable today are dealt with (2018).

3.1 The Possibilities of Self-Care for Retirement Purposes

The Hungarian state offers three possibilities of self-help for pension purposes in the personal income tax system, which are:

- voluntary pension fund;
- retirement savings account (shortly NYESZ);
- pension insurance.

Table 1 compares these possibilities based on their different characteristics.

Table 1. Comparison of Self-Care Products for Retirement Purposes

Characteristics	Voluntary pension fund	NYESZ account	Pension insurance	
			Traditional life assurance	Unit-linked life assurance
Service provider	Pension fund	Bank/Investment service provider	Insurance company	
Rate of tax relief	20% maximum 150 thousand HUF (533 USD)	20% maximum 100 thousand HUF (355 USD), if retired before 2020, 130 thousand HUF (462 USD)	20% maximum 130 thousand HUF (462 USD)	
The amount of annual payment required to reach the maximum tax allowance	750 thousand HUF (2665 USD)	500 thousand HUF (1777 USD)	650 thousand HUF (2310 USD)	
Employer is entitled to a fringe benefit	Yes	No	No	
The amount of regular payment obligation	Flexible	No	Generally minimum 10-12 thousand HUF (36-43 USD)	
The savings can be transferred to another institution	Yes	Yes	No	
Investment risk level	Medium	High	Low	Medium
Guarantees interest / returns	No	No	Yes	No
Customer’s degree of investment expertise	Low	High	Low	Medium
A custom asset portfolio / portfolio is optional	No	Yes	No	Yes

Note. 1 USD = 281.43 HUF on June 2018 by National Bank of Hungary.

Source: author’s editing based on the data of the National Bank of Hungary.

3.1.1 Voluntary Pension Fund

This is the oldest discount form of the self-care products for retirement purposes available since 1995 in the Hungarian tax system, and this is the only one that can be claimed as an employer's fringe benefit. However, the advantage, i.e., it can be increased with the employers' contributions, is also a disadvantage since tax allowances are not applicable only after the individual payments. The allowance is currently 20% of the amount paid individually, up to a maximum of 150 thousand HUF (533 USD) since 2014.

Its benefits include the following:

- it does not require any particular expertise;
- the taxpayer receives the benefit each year;
- the beneficiary can be granted, there is no statutory provision;
- in the form of a fringe benefit, payments can be increased.

The disadvantages are as follows:

- the allowance is only available after individual payments;
- taxpayers who are in the age of 50 have a favourable opportunity because voluntary pension funds are fundamentally invested in government bonds, but the younger generation may also find a more favourable form of investment in the market;
- After a 10-year waiting period, the individual may choose to retain membership with unchanged conditions or without paying membership fee or continue his / her financial affiliation in an unchanged form but will withdraw all or part of the amount recorded on his or her individual account. Money cannot be redeemed for 10 years;
- the limited nature of the investment portfolio.

Table 2 provides a brief historical review of changes in pension fund payments, the largest change occurred in 2006 when only payments were made to individual accounts kept with the voluntary pension fund, which is a significant change compared to the time that the tax office transferred the amounts due to the beneficiaries. In 2004, they aggregated the total of voluntary funds accounts and the maximum amount was 120 / 150 thousand HUF (426 / 533 USD).

Table 2. A Historical Overview of the Statutory Provision of the Personal Income Tax Act and the Titles of the Pension Fund Payment

Period	Payment	The measure of allowances of the pension fund contribution (in %)	The maximum amount of allowances of the pension fund contribution
1995-1999	direct transfer to the beneficiary	50	355 USD (100 thousand HUF)
2000-2003	direct transfer to the beneficiary	30	355 USD (100 thousand HUF)
2004-2005	direct transfer to the beneficiary	30	355 USD (100 thousand HUF)

2006-2010	crediting the individual account with the voluntary pension fund	30	355 USD (100 thousand HUF)
2011-2013	crediting the individual account with the voluntary pension fund	20	355 USD (100 thousand HUF)
2014-2018	crediting the individual account with the voluntary pension fund	20	533 USD (150 thousand HUF)

Note. 1 USD = 281.43 HUF on June 2018 by National Bank of Hungary.

Source: author's own editing based on the single annual provisions of Act CXVII in 1995 on personal income tax.

3.1.2 Pension Savings Account

In 2006, not only the report on the operation of voluntary mutual pension funds was changed, but also from this year a pension savings account could be opened in Hungary. 44 / B. §of Act CXVII on Personal Income Tax Act defines the right to benefit from a retirement savings account. The right of disposal here also means that, on the basis of a private person's declaration of personal income tax, the tax authority transfers within 30 days the amount of the discount to the private savings pension account.

Table 3. The Historical Review of the Amount of Contributions to Pension Savings Accounts

Period	Payment	The measure of allowances of the pension fund contribution (in %)	The maximum amount of allowances of the pension fund contribution
2006-2010	crediting individual account	30	100 thousand HUF (355 USD) if retirement age is reached before 01 January 2020 max. 130 thousand HUF (462 USD)
2011	crediting individual account	20	100 thousand HUF (355 USD) if retirement age is reached before 01 January 2020 max. 130 thousand HUF (462 USD)
2014-2018	crediting individual account	20	100 thousand HUF (355 USD) if retirement age is reached before 01 January 2020 max. 130 thousand HUF (462 USD) Limitation: up to the maximum amount of voluntary fund payments, retirement savings account and pension insurance. 280 thousand HUF is available

Note. 1 USD = 281.43 HUF on June 2018 by National Bank of Hungary.

Source: author's own editing based on the single annual provisions of Act CXVII in 1995 on personal income tax.

Benefits include

- the account can be opened by paying a minimum of five thousand forints;
- if the taxpayer has basic investment knowledge and is capable of compiling his own portfolio of securities, it is a good option;
- since 2010, the Pension Savings Account may be transferred to another institution eligible for account keeping.

Drawbacks include

- If the account is to be terminated before reaching retirement age, the amount of tax deductions previously transferred must be paid back to the tax authority by 20 percent.

3.1.3 Pension insurance

From 1 January 2014 the option to benefit from a pension insurance scheme can effectively stimulate long-term savings. On the basis of the data published in the 2017 yearbook of the Association of Hungarian Insurance Companies (briefly MABISZ), within life assurance, pension insurance was particularly dynamic exceeding 50%, in the case of both the classical mixed and unit-linked insurance. Almost 10% of total life insurance premiums were already covered by pension insurance (MABISZ, 2017).

This is in fact a life assurance policy for saving, the expiry date of which is the retirement age when the contract is concluded.

The discount rate is 20% of the deposit, up to 130 thousand HUF. The advantage is that the number of assets in the investment portfolio is high and high returns are available.

3.2 Voluntary Mutual Insurance Fund Payments

This group includes the benefits of voluntary pension and health insurance funds as well as self-help cash payments. Table 4 shows how the discounts that may be used depend on the purpose of deposit making between 1995 and 2018. Voluntary pension fund payments have already been discussed in section 3.1.1. However, we must also mention them here, as the law limits all the voluntary mutual fund payments together.

Table 4. Changes in Voluntary Mutual Funds Payments between 1995 and 2018

Period	Payment	Pension fund	Health insurance fund	Mutual fund	Health insurance and mutual fund together	Total of voluntary funds accounts
1995-1997	direct transfer to the beneficiary	50%, max. 100 thousand HUF (355 USD)	25%, max. 100 thousand HUF (355 USD)	25%, max. 100 thousand HUF (355 USD)	-	max. 100 thousand HUF (355 USD)
1998-1999	direct transfer to the beneficiary	50%, max. 100 thousand HUF (355 USD)	25%, max. 100 thousand HUF (355 USD)	25%, max. 100 thousand HUF (355 USD)	-	max. 100 thousand HUF (355 USD) / 130 thousand HUF (462 USD)

2000	direct transfer to the beneficiary	30%, max. 100 thousand HUF (355 USD)	30%, max. 100 thousand HUF (355 USD)	30%, max. 100 thousand HUF (355 USD)	-	max. 100 thousand HUF (355 USD) /130 thousand HUF (462 USD)
2004-2005	direct transfer to the beneficiary	30%, max. 100 thousand HUF 355 USD)	30%, max. 100 thousand HUF (355 USD) +10% for prevention services +10% deposit for min. 24 months	30%, max. 100 thousand HUF (355 USD)	30%, max. 100 thousand HUF (355 USD)	max. 120 thousand HUF (426 USD / 150 thousand HUF (533 USD)
2006-2010	crediting the individual account with the voluntary pension fund	30%, max. 100 thousand HUF (355 USD)	30%, max. 100 thousand HUF (355 USD), +10% for prevention services +10% deposit for min. 24 months	30%, max. 100 thousand HUF (355 USD)	30%, max. 100 thousand HUF (355 USD)	max. 120 thousand HUF (426 USD / 150 thousand HUF (533 USD)
2011-2013	crediting the individual account with the voluntary pension fund	20%, max. 100 thousand HUF (355 USD)	20%, max. 100 thousand HUF (355 USD), +10% for prevention services +10% deposit for min. 24 months	20%, max. 100 thousand HUF (355 USD), +10% for prevention services +10% deposit for min. 24 months	20%, max. 100 thousand HUF (355 USD)	max. 120 thousand HUF (426 USD / 150 thousand HUF (533 USD)
2014	crediting the individual account with the voluntary pension fund	20%, max. 150 thousand HUF (533 USD)	20%, max. 150 thousand HUF (533 USD), +10% for prevention services +10% deposit for min. 24 months	20%, max. 150 thousand HUF (533 USD) , +10% for prevention services +10% deposit for min. 24 months	-	max. 150 thousand HUF (533 USD)
2014-2018	crediting the individual account with the voluntary pension fund	Up to the maximum amount of voluntary fund payments, retirement savings account and pension insurance. 280 thousand HUF is available				

Note. *max. 130 thousand HUF (464 USD) if retirement age is reached before 1 January 2020.

Source: author's own editing based on the single annual provisions of Act CXVII in 1995 on personal income tax.

The range of services provided by insurer funds is as follows:

- the pension fund may only provide retirement benefits,

- the self-help fund can only carry out self-help tasks.
- the health fund can provide:
• subsidies on the price of medicines and medical aids,
• in case of sickness incapacity, the total or partial replacement of the lost income,
• in the event of the death of a fund member, the support of the relatives.

Voluntary mutual insurance funds are regulated by Act XCVI of 1993. This law contains the ways in which the revenue of the fund can be utilised:

- hedge fund: to finance services;
- operational fund: to cover operating costs;
- liquidity fund for collecting non-temporarily used funds and ensuring the solvency of the fund as a general reserve of the other two funds.

The main characteristics of voluntary mutual funds include:

- The funds provided by the funds are eligible only to the members of the fund and their beneficiaries.
- The management of the funds can only be directed to the organization and performance of the services specified in their statutes.
- The members are also owners of the funds.
- Funds operate on a non-profit basis, that is, the returns of its business can only be used for the purpose of its core business.

In 2000 a major change took place in voluntary insurance fund payments, when the discount rate was set to a standard 30% and since then the benefits have not been applicable after the employer's contributions. Since that year, a new rule has been introduced, which allows the employer to pay an amount to employee's personal account which is tax-free and exempt from contributions.

As a result of the change in 2006, the voluntary mutual-funded tax allowance was transformed into a subsidy funded at the fund's personal account. As a result, discounts are not directly credited to individuals (e.g., their bank account) instead, to their individual accounts, thus increasing the value of accumulated capital.

From 2014 onwards, a total limit of $ 995 (280 thousand HUF) was introduced for voluntary fund payments, the amount paid for the retirement savings account and the pension insurance contributions.

3.2.1 Pension Fund

The Hungarian pension system was radically transformed on 1 January 1998, and the former pay-as-you-go social security system became a mixed system. In addition to the State Pension Fund, private pension funds have been established, which operate on a funded basis. Under the funded scheme, the payments of individual members are recorded separately, allowing for a certain deferred consumption, i.e., the taxpayer himself uses the accumulated payments and their returns after retirement. An important step forward is the inheritance of the amount collected on an individual's account if the fund member dies before the start of the retirement service.

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3.2.2 Voluntary Health Insurance Funds

The purpose of creating voluntary health funds is to protect health:

– supplementing the benefits not at all or only partially supported by social security,

– reducing the risks that appear at active age.

3.2.3 Mutual funds

The self-help fund complements the other voluntary funds. It can provide supplementary self-help fund services and life-help self-help fund services to fund members and their close relatives.

The scope of the services that they provide may be the following based on 50 / B. §:

– benefits related to the birth of a child,

– unemployment benefits

– aid related to fire and elemental damage,

– aid for illness and health status,

– aid for the survivors in the event of death,

– academic year start-up, school-year (enrolment) subsidies,

– subsidies on the price of medicines and medical aids,

– supporting public utility bills,

– support for repayment of housing mortgage loans,

– home care,

– supporting elderly care.

3.3 Discount on Long-Term Investment Income

Those who keep their money on a long-term investment account (TBSZ shortly) for at least 5 years will benefit from interest and rate tax exemption. This discount is valid from 1 January 2010. The personal income tax from a long-term investment is tax if the taxpayer (investor) following the year of payment:

– does not withdraw from the invested amount until the end of the year, the returns are taxed positively (10% tax rate).

– does not withdraw from the invested amount until the end of the year, the returns are not taxed (0% tax rate).

In the case of a withdrawal prior to the end of the third year following the opening of the account, no preferential taxation is applicable, a 15% tax is payable after the returns.

From 1 January 2013, the termination of the borrowing period shall not be the conversion or replacement of the securities if the private individual makes a declaration that the securities exchanged, or the money received instead of the securities shall be included in the booking record.

The characteristics of the long-term investment account are as follows:

- An individual may enter into a maximum of two contracts in one calendar year with a financial service provider: a long-term investment deposit account contract or a long-term investment securities contract.

- Assets between investment contracts and accounts cannot be grouped.

- In the securities account, portfolio rearrangement, i.e. sale and purchase, is always possible if it does not involve withdrawal.
- The long-term investment account can be opened at a minimum of 25 thousand HUF or by 1 January 2013 with the payment of its corresponding foreign currency.
- The year of opening the account is the year when the account can be paid without limitation until 31 December of the year of opening the account, but no payment can be made in the subsequent period. However, a new account can be opened because the number of contracts is not limited.

3.4 Other Indirect Benefits

The family tax benefit of the Personal Income Tax Act also has a significant impact on long-term savings as the net income is higher for families. The amount and use of the family tax allowance has changed a lot in recent years. From 2014, it has been made possible for households with lower incomes to benefit from a higher family tax base, and this discount can be used with personal income tax of 16% (now 15%), plus personal contributions (10% + 7%). The higher income remaining in the family allows for higher savings, which can be used for various purposes, such as payment for Start accounts, opening a housing savings account, and also it can be used to make payments to voluntary welfare funds or voluntary self-help funds in order to safeguard the future well-being of children, secure their homes, educate them and safeguard their health, while allowing the use of additional tax benefits to households.

As of 1 January 2006, the Hungarian state provides state support to all children born after giving birth. In addition, if the parent has chosen a financial institution with a Start Account and paid or will pay for that account, then 10% of the amount paid, up to a maximum of 6000 HUF per year, will be paid as state subsidy.

On 1 January 1997, the Law on Housing Savings entered into force. Housing savings banks specializing in housing savings deposits form a separate capital market subsystem and have created a new financing option for today's money and capital markets. Housing savings banks provide assistance to those who can spend more than one year on a regular basis to realize their housing goals. The advantage of the flat savings bank model is that both deposit and lending rates are fixed, so their magnitude is not subject to interest rate fluctuations in the money market. In addition, it is also favourable in Hungary, because state subsidies also apply to the housing savings bank. The low return on the deposit side is offset by state subsidies. The grant is not made through the personal income tax system, but by providing direct non-repayable state subsidies.

3.5 Benefits Associated with Earlier Savings

In the Hungarian Personal Income Tax Act, a number of tax benefits can be used that have an impact on domestic savings. So far, the benefits that can be enforced under the current regulation have been presented, and now the discounts that could be used in the past are dealt with, such as the personal income tax on life assurance and home loan repayment.

3.5.1 Housing Benefits

After retirement and health preservation, the third most popular area that the domestic population can save is housing (house or flat purchase, renovation). From 1995 onwards, 20 percent of the annual tax savings of 60000 forints (214 USD) paid to the financial institution for flat-rate deposit contracts entered into the name of the saver could be enforced in the personal income tax. When it came to withdraw the amount of savings, the purpose was to be verified by a relative (spouse, former spouse and relative, including the adoptive, stepless and nurtured child, and adoptive stepfather and foster parent). Every year, the available support has increased steadily, so that such a significant increase in the rate of the benefit has attracted a lot of interest from the stakeholders. This significant increase lasted until 2006 and was discontinued between 2007 and 2015 and could not be applicable by 2016 at all. Between 1995 and 2015, the home improvement allowance was regulated by the national personal income tax law, the main changes of which are shown in Table 5.

Table 5. The Most Important Changes of Housing Benefits of the Hungarian Personal Income Tax Law between 1995 and 2015

Period	Measure of amount of housing benefits (in %)	Maximum amount of housing benefits
1995-1996	20	On capital of housing contract after 31 December 1993 and interest 20%, maximum 35 thousand HUF (124 USD).
1997-1999	20	On capital of housing contract after 31 December 1993 and interest 20%, maximum 35 thousand HUF (124 USD). + applicable after additional costs
from 2000	20	On the credit of housing savings account contract
from 2001	20	On used houses capital, interest and ancillary costs may also be applicable Maximum 35 thousand HUF (124 USD) similarly to previous years 40%, maximum 240000 HUF (853 USD) on a new home
from 2002	40	Maximum 240000 HUF (853 USD) even on used houses
2002-2003	40	The 240000 HUF (853 USD) tax benefit could be shared between debtors
from 2004	40 (new house) 30 (used house)	Decreased from 240000 HUF (853 USD) to 120000 HUF (426 USD). Decreased from 40% to 30% in the case of used houses and market-based loans. Applicable up to an income of 3400000-4000000 HUF (1208-1421 USD) or 4400000-5000000 HUF (1563-1776 USD). In the case of a new home up to a maximum 15 million HUF (53299 USD) sales price. In the case of market-based loans and used houses up to a maximum 10 million HUF (35533 USD) sales price. For maximum 5 tax years + 1 year after each child entitled to family allowance.

from 2005	40 (new house) 30 (used house)	It is also applicable after the amount of early repayment and the lending fee.
2005-2006	40 (new house) 30 (used house)	It also includes the amount of early repayment and the lending fee. In the case of a market-based loan, it can be enforced in any tax year when the claimant has a child entitled to (or will be entitled to) family allowance during the repayment period.
2007-2015 benefit prolonged	40 (new house) 30 (used house)	Those who started their loan repayment before 1 January 2007 may validate them until the conditions are fulfilled or until the maturity of the loan.
from 2016		Discontinued

Note. 1 USD = 281.43 HUF on June 2018 by National Bank of Hungary.

Source: author's own editing based on the changes of Act CXVII of 1995.

3.5.2 Benefit of Personal Income Tax Linked to Life Assurance

The Personal Income Tax Act provides for a specific insurance tax allowance, the rate of which is 20 per cent of the fee paid for life and pension insurance in the tax year, but up to a maximum of 50 thousand forints in 1995. The discount rate has changed several times, until finally it has been abolished since 2010 and has been restored to tax law since 2014, but it is only applicable after retirement insurance. Table 6 shows the change in insurance benefits in chronological order.

Table 6. Main Changes in the Insurance Benefit of the Personal Income Tax

Period	Measure of amount of insurance benefit (in %)	Maximum amount of insurance benefit
1995-2002	20	50 thousand HUF (178 USD)
2003-2044	20	100 thousand HUF (355 USD), 30% on returns
2005-2006	20	Up to 6000000-6500000 HUF income (2132-2310 USD)
2007-2008	20	Up to 3400000-3900000 HUF income (1208-1386 USD)
2009	30	100 thousand HUF (355 USD),
2010-2013	Abolished	
2014-2018	Only after pension insurance, transferred to the account held with the insurance company. 20%, maximum 130000 HUF (462 USD)	

Note. 1 USD = 281.43 HUF on June 2018 by National Bank of Hungary.

Source: author's own editing based on the changes of Act CXVII of 1995.

4. Conclusions

There is a very different regulatory system in each country, and the state contributes in a variety of ways and to the increase in the volume of savings and changes in its structure. During their different life cycles, households make a series of long-term financial decisions. The approach of self-caring is present in individual and family life, but not with the same intensity. Nowadays, households have become more aware of their financial decisions.

Of the regulatory systems, the tax system is one of the most important instruments for the government to encourage savings. Although tax systems are relatively stable, in fact, they are constantly changing. Taxes and their rates, as well as changes in other factors, serve to implement different tax policies. Governments play an important role in creating economic prosperity in countries. Basically, the tax system means a transfer made by the state from the enterprises, and the state transfers it back to households to support the objectives listed above.

I analized the incentive elements of household savings in the Hungarian tax system which applicable today (pension and healthcare Insurance purposes) and the discounts that could be used in the past are dealt with, such as the personal income tax on life assurance and home loan repayment between 1995 and 2018. I collected other discounts which has contact with tax system and helps long term savings.

The Hungarian state offers three possibilities of self-help for pension (retirement) purposes in the personal income tax system, which are voluntary pension fund, retirement savings account and pension insurance. I compared these possibilities and analized by different point of views. The voluntary pension funds the oldest form for retirement purposes available in the Hungarian tax system. This is the only one that can be claimed as an employer's fringe benefit and it does not require any particular expertise. The pension saving account is a good option, if the taxpayer has basic investment knowledge and is capable of compiling his own portfolio of securities. From 2014 onwards the government merged the discounts, a total limit of 280,000 HUF was introduced for voluntary fund payments, the amount paid for the retirement savings account and the pension insurance contributions.

The task of the government is important to increase and motivate households' savings.

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References

Ambrus, R., & Kaufman I. (2011). Tax-saving, innovative ententives for small and medium-sized enterprises in Hungary. University of Economics in Bratislava. *Journal of International Relations*, *9*(1), 77-83.

Bakos-Tóth, E., & Baranyi, A. (2016). *A pénzügyi ismeretek főiskolán történő oktatásának gyakorlati tapasztalatai és perspektívái*. In Takácsné György K. (szerk.), *Innovációs kihívások és lehetőségek 2014-2020 között: XV. Nemzetközi Tudományos Napok* (p. 1704). Konferencia helye, ideje: Gyöngyös, Magyarország.

Bodie, Z., Merton, R. C., & Cleeton, D. L. (2011). *A pénzügyek közgazdaságtana* (p. 627). Budapest: Osiris Kiadó.

Bozsik, S., & Fellegi, M. (2010). *Adózási ismeretek* (p. 85). Miskolci Egyetem.

Brockdorff, P. (2012). Pensions and Intergenerational Transfers: A Malta Perspective. *Bank of Valletta Review*, *45*(Spring Issue), 87-108.

Carone, G., Schmidt, J. H., & Nicodéme, G. (2007). Tax revenues in the European Union: Recent trends and challenges ahead. *European Commision, European Economy, Economic Papers*, *280*, 28. https://doi.org/10.2139/ssrn.1803047

Csiszárik-Kocsir, Á., Varga, J., & Fodor M. (2016). A pénz helye és értéke a mindennapi pénzügyi gondolkodásban egy kutatás eredményei alapján. *"Korszerű szemlélet a tudományban és az oktatásban"—A Selye János Egyetem Nemzetközi konferenciája, Komarno, 2016* (pp. 73-83).

Epley, N., & Gneezy, A. (2007). The Framing of Financial Windfalls and Implications for Public Policy. *The Journal of Socio-Economics*, *36*(1), 36-47. https://doi.org/10.1016/j.socec.2005.12.012

Erdős, T. (2003). *Fenntartható gazdasági növekedés* (p. 518). Budapest: Akadémiai Kiadó.

Földvári, P. (2009). Estimating Income Inequality from Tax Data with A Priori Assumed Income Distributions in Hungary, 1928-1941. *Historical Methods*, *42*(3), 111-115. https://doi.org/10.3200/HMTS.42.3.111-115

Halpren, L., Koren, M., Kőrösi, G., & Vincze, J. (2004). A minimálbér költségvetési hatása. *Közgazdasági Szemle*, *51*(4), 325- 345.

Hetényi, I. (2000). *Miért, hogyan, mennyit? Adókönyv. Budapest: National Tax and Customs Administration of Hungary* (p. 33). Retrieved October 23, 2004, from http://www.nav.gov.hu/data/cms3473/ado2000.pdf

Horváthné Kökény, A. (2012). Jelen és/vagy jövő, azaz a megtakarítások dilemmája. *Hitelintézeti Szemle (Financial and Economic Review)*, *11*(Special Edition), 101-110.

Horváthné Kökény, A. (2014). *Az állami szabályozás hatása a lakosság hosszú távú megtakarításaira* (p. 272). PhD értekezés Szent István, Egyetem Gazdálkodás- és Szervezéstudományok Doktori Iskola.

Hussein, K. A., & Thirlwall, A. P. (1999). Explaning Differences in the Domestic Savings Ratio Across Countries: A Panel Data Study. *Journal of Development Studies*, *36*(1), 31-52. https://doi.org/10.1080/00220389908422610

Labri, D. A. (2013). The Long Run Determinants of Private Domistic Saving sin Ghana: A Cointegration Approach, *Journal of Economics and Sustainable Development*, *4*(4), 125-137.

Magyar Biztosítók Szövetsége (MABISZ). (2017). *Magyar Biztosítók Évkönyve* (p. 25). Retrieved April 23, 2018, from http://www.mabisz.hu/images/stories/docs/publikaciok/evkonyv-2017-magyar.pdf

Magyar Nemzeti Bank Fogyasztóvédelmi Központ. (n.d.). Retrieved May 2, 2018, from https://www.mnb.hu/fogyasztovedelem/dontenem-kell/ongondoskodas/nyugdij-celu-ongondoskodas/nyugdij-celu-ongondoskodasi-termekek-osszefoglalasa

Mankiw, N. G. (2005). *Makroökonómia* (p. 564). Budapest: Osiris Kiadó.

Nemec, J., & Wright, G. (Szerk.). (2000). *Theory and Practice in Central European Transition* (p. 501). Közösségi Pénzügyek: Elmélet és gyakorlat a Közép-Európai átmenetben. Budapest: Aula Kiadó.

OECD. (2018). *Taxation of household savings* (No. 25, p. 242).

Personal Income Tax Act CXVII of 1995. (n.d.).

Saavedra, P. (2007). *Flat Income Tax Reforms, Fiscal Policy and Economic Growth*. World Bank. Retrieved June 6, 2018, from http://www.siteresources.worldbank.org/INTECA/Resources/257896-1182288383968/FiscalPolicy&EconomicGrowthinECA_Ch8.pdf

Simon, A. (2002): *Útmutató a makroökonómiához* (p. 237). Budapest: Osiris Kiadó.

Smith, A. (1776). *An Inquiry into the Nature and Cause of the Wealth of Nations*. Pennsylvania University. Manis J. (2005). *The Electronic Classics Series* (p. 786). Retrieved May 15, 2013, from http://www2.hn.psu.edu/faculty/jmanis/adam-smith/wealth-nations.pdf

Stiglitz, J. E. (2008). *Report by the Stiglitz Commision on the Measurement of Economic Performance and Social Progress* (p. 12). Executive Summary. Retrieved April 15, 2018, from http://www.stat.si/doc/drzstat/Stiglitz%20report.pdf

Tatay, T., Vágyi, F. R., &Varga, J. (szerk). (2011). *A pénzügyi intézményrendszer Magyarországon* (p. 418). Sopron: A Soproni Fesőoktatásért Alapítvány.

Vígvári, A. (2008). *Pénzügy(rendszer)tan* (p. 468). Budapest: Akadémiai Kiadó.

Vörös, Gy. (2011). *Az adók versenyképességre gyakorolt hatása az Európai Unióban* (p. 190). Doktori értekezés. Retrieved June 2, 2018, from http://www.szie.hu//file/tti/archivum/Voros_Gyula_disszertacio.pdf