The Fiscal Placebo
Fiskální placebo

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Abstract
Discretionary fiscal policy is associated with long time lags that, according to many authors, prevent its efficient implementation during economic crises. Implementation lags, i.e. the lag between the day on which economic policymakers decide on a specific form of response to the actual economic situation and the day on which a relevant law takes effect, have the signalling function. In this article we analyse the implementation lag in the discretionary fiscal policy in the Czech Republic during economic crises. First, we present arguments according to which time lags are pro-cyclic and thus they prevent implementation of the discretionary fiscal policy. We will verify the grounds behind the arguments concerning the Czech economy. Furthermore, we focus on the reasons due to which the implementation lag may be neutral as concerns the economic cycle. In the third part, we present our own concept of fiscal placebo pursuant to which the implementation lag may have negative, neutral, or even positive impacts on the actual economy. We have demonstrated, that anti-crisis laws have taken effect, with a single exception, always only after the end of the recession to which they were supposed to react and the volume of the funds used by the government to achieve stabilization is relatively low.

Keywords
Czech economic policy, fiscal discretion, fiscal placebo, Great Recession, implementation lag, signalizing function

Abstrakt
Diskreční fiskální politika je spjata s dlouhými časovými zpožděními, která podle řady autorů znemožňují její efektivní používání během ekonomických krizí. Implementační zpoždění, tedy zpoždění mezi dnem, kdy se tvůrci hospodářských politik rozhodli o konkrétní podobě reakce na reálnou ekonomickou situaci, a dnem, kdy příslušný zákon nabyl účinnosti, však mají také funkci signalizační. V předkládaném příspěvku analyzujeme implementační zpoždění diskreční fiskální politiky v České republice během ekonomických krizí. Nejprve uvádíme argumenty, podle kterých jsou časová zpoždění procyklická, a tedy znemožňují provádění diskreční fiskální politiky. Opodstatněnost těchto argumentů ověříme pro českou ekonomiku. Dále se zabýváme důvody, podle kterých může být implementační zpoždění neutrální vzhledem k ekonomickému cyklu. Ve třetí části zavádíme vlastní koncept fiskálního placeba, podle kterého implementační zpoždění může mít záporný, neutrální či dokonce kladný dopad na reálnou ekonomiku. Ukázali jsme, že protikrizové zákony nabyly (s jedinou výjimkou) účinnosti vždy až po skončení recese, na kterou měly reagovat, přičemž jejich finanční objem byl vždy relativně nízký.

Klíčová slova
česká hospodářská politika, fiskální diskrece, fiskální placebo, implementační zpoždění, signalizační funkce, Velká recese

JEL Codes
E62, H30, H70, K40

Introduction

The 2008 economic crisis brought back the debate older than six decades about the use of discretionary fiscal policy tools to stabilize the economic cycle. *The Great Recession*[1] has brought up also a new discretionary fiscal policy form reacting to the problems involving a public finance deficit and quickly growing public debt. Economic policymakers started (already before the start of the Great Recession) to return slowly to Keynesian concepts that they abandoned in the seventies of the 20th century. The creation of the European currency union with common currency - euro - was the reason behind the renaissance of the fiscal discretion. The euro area member states had to give up the autonomy of the monetary policy and in the environment of the decentralized fiscal policy the fiscal discretion has inevitably gained on importance. While the monetary policy is hard to understand for citizens, the discussion about a reduction or an increase in tax rates, support for new jobs, implementation of investment stimuli or reduction in the public debt is understandable for voters and may affect electoral results especially during an economic crisis.

Auerbach (2005, p. 4) notes: *"Politicians perhaps never experienced the same loss of enthusiasm for activist fiscal policy that economists did. (...) Perhaps politicians have not learned anything about the practice of fiscal policy since the 1970s; or perhaps economists have."* One of the things that economists have learnt is probably to not underestimate the risks of long time lags within the economic policy. While external lags are relatively short as concerns the fiscal policy and are not deemed to be a fundamental problem, internal lags - especially implementation lags, which are the only lags that may be affected to a significant extent by fiscal policymakers - represent one of the fundamental arguments against the use of deliberate anti-crisis fiscal discretion. Therefore it is astonishing that no analysis of the length and structure of the implementation lag has been presented in the Czech expert literature so far. The length of the implementation lag in discretionary fiscal policy calculated by us may represent an input for future analyses dealing with the canonical question: "Rules or discretion?"[2] Contemporary economic policymakers and theoretical economists face this old issue again but this time under totally new economic circumstances occurring after the end of the Great Recession.

The existence of time lags ranks among fundamental arguments against the use of discretionary fiscal policy within both fine tuning of the economy and mitigation of impacts of an economic recession. Already in 1942, Keynes presented a sceptic attitude towards the ability of governments to implement anti-crisis measures quickly: "Organized public works, at home and abroad, may be the right cure for a chronic tendency to a deficiency of effective demand. But they are not capable of sufficiently rapid organization (and above

1 *Taking the cue from the term Great Depression that is reserved within the economic history for the crisis taking place in the thirties of the twentieth century, the term Great Recession is used to identify the longest recession after the World War II, which started in the last quarter of 2007 (comp. Jílek 2013, p. 310 and Grusky et al. 2011).*

2 *Comp. canonical article Rules Rather than Discretion (Kydland and Prescott 1977).*

all they cannot be reversed or undone at a later date), to be the most serviceable instrument for the prevention of the trade cycle" (Keynes 1942, cit. according to Bartlett 1992).

Therefore, in this study we deal with the consequences of the implementation lag in respect of the economic policy while defining, for the purposes of this work, discretionary fiscal policy measures *as a legal norm through which the volume of state budget income or expenditures is changed outside the budgeting process.* We focus only on laws, not on government decrees or similar legislative norms that should be used to implement fiscal discretion only exceptionally due to their nature.

The aim of this paper is to describe the effects of long implementation lags. First, we will briefly define the implementation lag in a discretionary fiscal policy and present a unique database created for the purposes of this analysis. Then we will present arguments according to which time lags are pro-cyclic and thus they prevent implementation of a discretionary fiscal policy. We will verify the reasoning behind the arguments concerning the Czech economy. The second sub-chapter deals with the grounds according to which the implementation lag may be neutral as concerns the economic cycle. In the third part we will present our own concept of fiscal placebo pursuant to which the implementation lag may have negative, neutral, or even positive impacts on the actual economy.

1 Implementation Lag

Interventions of economic policymakers within the economy take place in the real time (Slaný, 2003). If at the time t_0 a change in the economy takes place (an increase in prices or slowdown of the economic growth pace, for instance), a response takes place at the time $t_1=t_0+\lambda$ where λ represents a certain time lag. As concerns automatic stabilizers, $\lambda=0$, because automatic fiscal stabilizers react to the actual condition of the economy in the real time (Kalckreuth and Wolff 2007) and because they are not associated with inevitable discretionary and implementation lags (Šaroch et al. 2003). Unlike automatic fiscal stabilizers, the discretionary fiscal policy features a positive time lag. The longer the λ time lag is, the higher the probability that the economic reality at the time t_1 will differ from the economic reality at the time t_0 is. In such a case, fiscal discretion may have pro-cyclic effects instead of intended anti-cyclic effects (Slaný, 2003). Based on the comparison of various approaches towards classification of individual types of time lags (see Lipovská at al., 2016) we distinguish:

1. Recognition lag - the time lag between a change in the actual economy and its recognition. It depends on the activities of statistical agencies.

2. Decision-making lag - the time lag between the recognition of a change in the economy and a bill responding to that change.

3. Implementation lag - the time lag between the submission of a bill and its implementation within the legislation.

4. Effectiveness lag - the time lag between implementation of a law and initiation of a response within the actual economy.

The implementation lag is the only time lag within discretionary fiscal policy that may be minimized by economic policymakers through their own activities. For the purposes of the present study we define the implementation lag as the *period of time between a decision of economic policymakers on a specific form of the reaction to a fundamental change in the economy and implementation of that reaction within the legislation.* We divide further the implementation lag into the approval lag, i.e. the period of time between submission of a bill to the Chamber of Deputies until its publication in the Collection of Laws (i.e. until the effective date of the law) and the legislative lag which is the period of time between the publication of the law in the Collection of Laws and the date on which the law takes effect. Thus the length of the implementation lag is significantly affected by parameters of the legislative process.

Pursuant to the provision of § 99 of the Rules of Procedure of the Chamber of Deputies, the Chairman of the Chamber may declare **the state of emergency legislation** in case of extraordinary circumstances. A bill adopted during the state of emergency legislation is not subject to the first reading and the Chairman assigns it directly to committees along with the deadline that cannot be exceeded. During the second reading, the general debate may be abandoned and the speaking time may be limited to 5 minutes. The third reading of the bill may take place immediately after the end of the second reading. The Chairman of the Senate shall summon a meeting within ten days from the submission of the bill to the Senate but the Senate may return to the regular constitutional period of time (Boháč 2011, p. 97–98). The procedure within the state of emergency legislature is important especially in view of adoption of anti-crisis laws during the periods of economic recession.

A majority of authors agree that discretionary fiscal policy features long internal lags[3] and relatively short external lags while as concerns the monetary policy, the situation is different (compare with Marthinsens 2008, p. 417; Thomas 2005, p. 556 or McEachern 2014a, p. 686). Estimates of the average lags in both the monetary policy and the fiscal policy are showed in Table 1. The relatively shorter external lags in fiscal discretionary policy are explained by Jovanovski and Muric through the faster identification of effects of the fiscal policy, because while the fiscal policy affects the aggregate demand and income directly, the monetary policy affects them indirectly through modifications of interest rates. The recognition lags in both policies are similar. The fiscal policy features a longer implementation lag which is the result of the lengthy process of adoption of laws (Jovanovski and Muric 2011, comp. Taylor 2000).

3 *An internal lag is political; it is determined by the ability of economic policymakers to recognize a change in the economic situation and their ability to act within enforcement of a response to that change. On the contrary, an external lag is based on the willingness of economic entities to react to discretionary measures (Lipovská et al., 2016)*

Table 1: Estimates of average lags in the monetary policy and the fiscal policy (in months)

	Internal lag		External lags	Total lag
	recognition	action		
Monetary policy	3	0	1 –20	4–23
Fiscal policy	3	1–15	1–3	5–21

Source: Willes – "Lags in Monetary and Fiscal Policy" (1968), cited according to Jovanovski and Muric (2011).

Marthinsen (2008) defines intervals of all types of time lags. According to Marthinsen, the recognition lag length varies from three up to six months, the implementation lag (that includes also the decision-making lag) lasts from three months up to two years, and the effectiveness lag lasts from three months up to one year. Thus three or even fourteen calendar quarters may pass between a fundamental change in the economy and manifestation of the full effect of discretionary fiscal policy; the political (internal) lag lasts from two up to ten calendar quarters and the external (operational) lag may take from one to four quarters. Hoover draws attention to the fact that the total length of the internal lag exceeds the average recession (Hoover 2011); according to Gordon and Jorgenson, the internal (political) lag lasts ten calendar quarters (cit. according to Auerbach 2005). In 2001, Zeman, the social democratic prime minister, estimated that the time lag in the economic area lasts approximately two years[4], i.e. eight calendar quarters (Zeman, 2001).

A certain delay occurs already due to the recognition lag. In the monitored period, the Czech Statistical Office published the statistical estimate of the quarterly gross domestic product on the 70th calendar day after the end of the reference period[5] (Fischer, 2004). If we apply a narrower definition of a recession, the recession may be understood as at least two subsequent calendar quarters during which a drop in the actual gross domestic product occurs (Claessens, Kose 2009). This so called technical recession[6] is recognizable, based on the first GDP estimate, only after two quarters and 70 days, i.e. after 8-9 months.

The data concerning the implementation lag length are very variable and they range from 1 up to 30 months (see Table 2) while a majority of authors state estimates concerning only the economy of the U.S.A. But in the new millennium, the American fiscal policy features a shorter implementation lag (Taylor 2009). Moreover, Taylor states that the 2001 crisis started in the United States in March and ended in November, nevertheless discretionary fiscal policy measures were implemented already in June 2001, i.e. during the crisis. Similarly, the fiscal discretion featured a shorter implementation lag also during the crisis in 2008.

4 *Based on the context it is obvious that the then Prime Minister meant a fiscal policy lag.*

5 *In compliance with the standard ESA 2010 (see ČSÚ 2015 and Sixta 2014), currently the preliminary estimate of the GDP development for a calendar quarter that already ended published at the time T+45 days; the statistical estimate is published at the time T+60 days, and a more accurate estimate is published at the time T+90 days (ČSÚ 2015).*

6 *The term technical recession is used by the Czech Statistical Office, for instance (ČSÚ 2012).*

Table 2: Average length of the implementation lag

Author	Implementation lag length (in months)
Willes (Willes 1968, in Jovanovski 2011)	1–15
Scott, Barnett[7] (2008)	7,5
Blinder (2004)	30
Marthinsen[8] (2008)	3–24

Source: Processed by us.

Thomas (2005) points out, using the United States of America as an example, that a longer implementation lag in discretionary fiscal policy, when compared to the implementation lag in the monetary policy, is a logical consequence of the approval process involving both chambers of the US Congress and the President of the U.S.A. The length of the implementation lag is then affected predominantly by political obstacles.

Another political factor that affects the implementation lag length in the U.S.A. (when compared to Great Britain) is the weak party political discipline within the presidential system (Blinder 2004). According to Blinder, political disputes taking place in the Congress may delay the decision-making by many months - especially when one political party controls the White House and the other party controls the Congress.

2 Data and Methodology

Our analysis is based on a unique database that we have created based on a set of income and expenditure laws of the fiscal policy contained in a study prepared by the Czech National Bank *Fiscal Discretion in the Czech Republic in 2001–2011: Has It Been Stabilizing?* (Ambriško et al. 2012). It means the discretionary fiscal measures the volumes of which exceed 0.1% of GDP. Based on explanatory reports concerning bills, we have complemented this set by, for instance, the laws modifying the setting of investment stimuli or the laws promoting creation of jobs.

The basic database provided by the Czech National Bank distinguishes between the income and expenditure discretionary measures affecting the Czech economy during the

7 *Authors state that the monetary policy features a lag lasting only one calendar quarter on average and capital expenditures are implemented with a one year lasting lag.*

8 *According to Marthinsen, the term implementation lag covers both the decision-making lag and the implementation lag. Since within the Czech economy the decision-making lag lasts approximately 2 months (see Fischer 2004), pursuant to the definition used by us the implementation lag corresponds to the interval of 1–22 months.*

years 1995 - 2011[9]. Authors included into the database only the measures the impacts of which exceed 0.1% of GDP. Expenditure measures are a bit harder to process for the purposes of our analysis; a number of measures are implemented through implementing regulations especially by decrees of ministries or government regulations. Implementing regulations are not subject to the legislative process and their implementation is governed by the *Legislative Rules of the Government*, as amended.

The CNB database has not been created to analyse the implementation lag but it has served to assess the influence of fiscal discretion on macroeconomic activity (see Ambriško et al. 2012, p. 3). The scope of observation (*n*=28), which is absolutely insufficient for he needs of our analysis, has not been limiting in any manner in respect of the declared purposes of this study. If we want to analyse the implementation lag in the discretionary fiscal policy in the Czech Republic, we need to identify all relevant laws. Therefore it was necessary to include into our unique extended database both the laws implemented during the years 2011 - 2013 and the laws in respect of which the volumes of adopted discretionary measures do not exceed 0.1% of GDP. The third extension, in compliance with our definition of discretionary fiscal policy and discretionary measures, involves incorporation of the laws affecting the employment rate and investment stimuli. At the same time, it was necessary to exclude from the original database of the CNB the six discretionary measures implemented before the end of the year 1996 when the Senate, which did not exist at that time, did not participate in the legislative process at all. The limited database containing 22 laws was complemented by four tents of laws. Unless otherwise stated further in the text, the data file containing n = 62 observations is subject to an analysis. Laws were included into the extended database based on an analysis of explanatory reports concerning the laws adopted during the years 1997-2013[10] and stenographic minutes of the meetings of the Chamber of Deputies of the Parliament of the Czech Republic.[11]

2.1 Anti-crisis Laws

The role of time lags in the economic policy is important especially when adopting anti-crisis laws. Table no. 3 shows nine laws the explanatory reports on which explicitly prove that they had been drafted in response to an economic crisis.

9 We refer to that database as to the CNB database and use the term extended database to identify our own database created for the purposes of implementation lag measuring. Authors would like to thank Ing. Dana Hájková, M.A., Ph.D. and Ing. Pavel Soukup for providing the database and consultations.

10 Within the Automated Legal Information system (ASPI) 1652 explanatory reports are available for the period from 1 January 1997–31 December 2013, concerning the laws that took effect during that period

11 For more details see Lipovská et al. (2016).

Table 3: Anti-crisis laws

	Measure type	Description
Act no. 287/1997 coll.	restriction	A reduction in salaries of state officials
Act no. 289/1997 coll.	restriction	A reduction in the state budget expenditures in the area of transfers
Act no. 216/2009 coll.	expansion	A reduction in the period of tangible assets depreciation
Act no. 217/2009 coll.	expansion	Protection of debtors against bankruptcy during the crisis
Act no. 221/2009 coll.	expansion	Discounts for employers to reduce work costs
Act no. 287/2009 coll.	expansion	Potential co-participation of the government within stabilization of financial markets
Act no. 326/2009 coll.	expansion	Support for economic growth, mitigation of crisis impacts
Act no. 418/2009 coll.	restriction	A reduction in salaries of state officials
Act no. 192/2012 coll.	expansion	Stipulation of drawing on investments

Source: Explanatory reports concerning the above acts. Processed by us.

Table 4: Comparison of the implementation lags of anti-crisis and other laws, including the p-value of the t-test

	CHDIL	SIL	PRIL	AIL	LVIL	TIL
anti-crisis laws	73	25	16	151	0	149
other laws	102	30	10	180	46	226
p-value	0.16	0.37	0.19	0.25	0.14	0.09

Source: Own calculations. Note: CHDIL = implementation lag in the Chamber of Deputies of the Parliament of the Czech Republic, SIL = implementation lag in the Senate of the Parliament of the CR, PRIL = implementation lag associated with the President of the Republic, AIL = approval implementation lag, LVIL = legis-vacancy implementation lag,

TIL = total implementation lag. The p-values of the t-test are highlighted in respect of which we reject, at the 1% level of significance, the zero hypothesis on the equal length of a relevant implementation lag type concerning the bills discussed within both the standard and non-standard procedure.

Despite the fact that during the crisis individual lag elements where shorter when we compare anti-crisis laws with other laws (see Table 4), this difference is statistically insignificant. We have succeeded in proving, at the 10% level of significance, that the total implementation lag of anti-crisis laws is shorter than the total implementation lag of other

laws and this difference amounts to 77 days on average. Because the research is primarily intended to compare the set of urban population, the specific subset of socio-demographic characteristics of the each of the six towns was designed. The available data from the census of 2011 year were support for the creation of quotas.

3 Impacts of the Implementation Lag

In this chapter three potential impacts of the long-term implementation lag are analysed. Relevant literature (e.g. Friedman 1948) traditionally emphasizes the negative role of time lags in view of the pro-cyclic tendencies of fiscal policies. The first sub-chapter is devoted to negative impacts. In the second sub-chapter, we reflect the modern understanding of time lags: the Great Recession in 2007 diverted the traditional view in favour of the thesis of neutral character of time lags. In the third sub-chapter, we presents the third and totally different view - the concept of fiscal placebo. Pursuant to this concept, the implementation lag does not affect the actual economic cycle but it fulfils only the signalling function.

3.1 Negative Impacts of the Implementation Lag

According to critics of discretionary fiscal policy, the time lag increases the instability of the economy and leads to wobbling of the economic cycle, which is contrary to the stabilization objective. Friedman states that the lags *make impossible any definitive statement about the actual degree of stability likely to result from the operation of the monetary and fiscal framework described above* (Friedman 1948, p. 254), Economic growth estimates are published by the Czech Statistical Office on a quarterly basis. If discretionary fiscal policy is to level cyclic fluctuations (an idealized scheme of the anti-cyclic fiscal discretion is showed in Figure 1), the total lag in the discretionary fiscal policy would have to be shorter than three months so that a discretionary measure is adopted within the discussed quarter. If the total lag is longer, the cycle may wobble as the scheme in Figure 2 shows.[12] In this model example the economy has not been stabilized. On the contrary, after implementing the discretionary fiscal policy, the variability of the economic cycle is significantly greater than the variability of the original (subject to levelling) economic cycle.[13]

If the total implementation lag itself in the Czech Republic lasts over two quarters, the sum of the recognition, decision-making, and effectiveness quarters must be negative. Otherwise the total time lag will exceed one quarter.

The decision-making lag may be very short or even equal zero where there is a portfolio, prepared in advance, of directly applicable discretionary fiscal measures (expenditure programs, for instance) that may be submitted to the Senate almost immediately.

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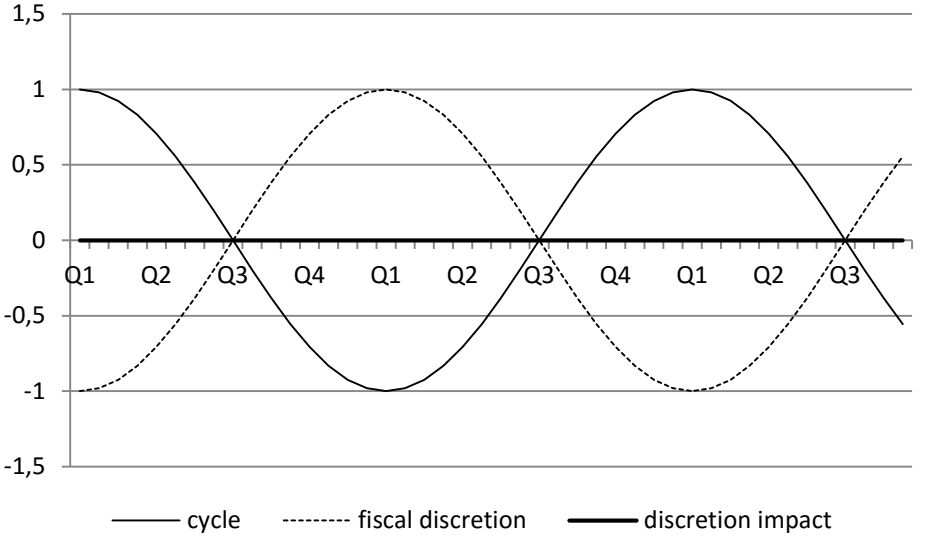
12 The model lag $\lambda=8$ months has been chosen arbitrarily similarly like the value of the potential $\bar{y}=0$. The schemes in figures 1 and 2 are based on an idealized assumption that the discretionary fiscal policy reacts to every variation from the potential and this through a discretionary measure the impact volume of which at the time $t_0+\lambda$ precisely balances the variation from the potential at the time t_0.

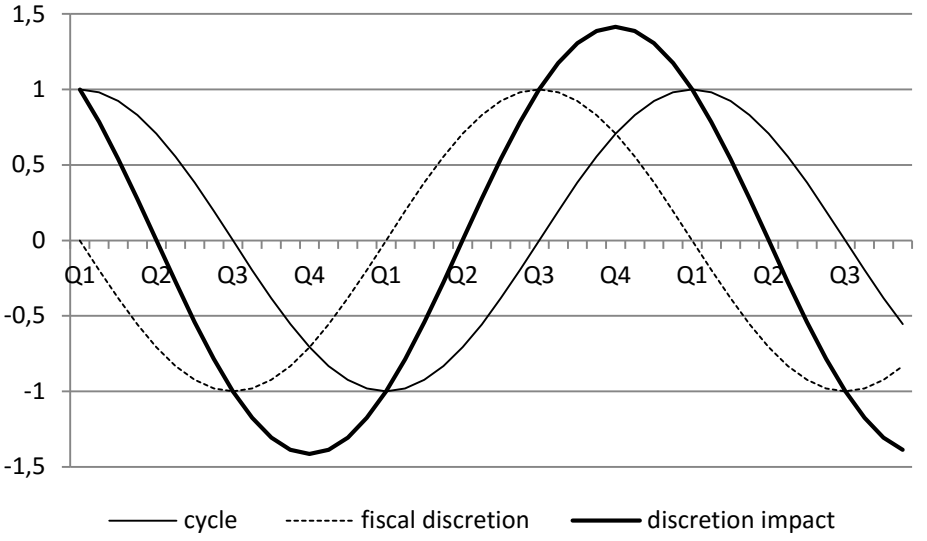
13 In this model example, the decisive variation increased from $\sigma=0.69$ to $\sigma=0.97$.

Figure 1: Ideal impact of fiscal discretion upon a zero lag



Source: Processed by us.

Figure 2: Impact of fiscal discretion on the economic cycle upon the lag λ=8 months



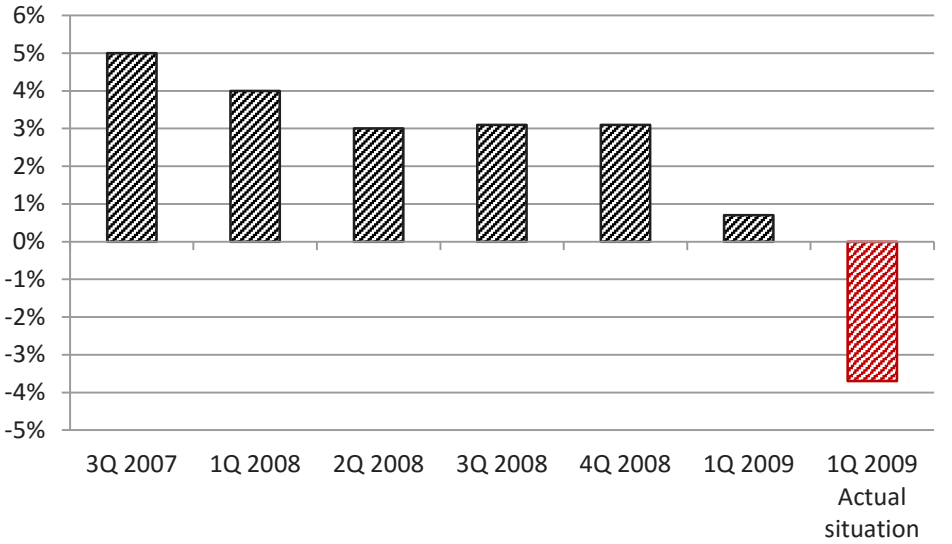
Source: Processed by us.

The recognition lag could be negative if we can predict precisely the economic changes that occur if economic policymakers do not interfere into the economic cycle (Friedman 1948). In fact, economic growth predicting is not very successful. There is a significant

difference between the preliminary estimate of the year-over-year GDP growth and the revised value (compare Čapek 2007 or Fischer 2004); prognoses of the actual economic growth are notoriously inaccurate. For instance, the macroeconomic prognoses of the Ministry of Finance of the CR are valid at the 5% level of significance only for twelve months (Vacková 2014). Figure 3 shows the modifications of the prognosis of the actual year-over-year GDP growth for the first quarter of 2009 when the Czech economy faced a recession. Despite the fact that the Czech National Bank refined its prognosis in time from the optimistic 5% predicted in the third quarter of 2007 to 0.7 % predicted already in the first quarter of 2007, the actual economic growth in the monitored period was negative (-3.7%). Due to the fact that the development of the economy is very hard to predict (especially during a recession period, compare with Vacková 2014), a negative recognition lag cannot be assumed.

The implementation lag that occurs during the legislative process has a significant informative function. During the process of approval of a bill, the general public may become familiar, in general, with the legislator´s intention. Thus economic entities may react to expected changes (e.g. as concerns taxes) even before such changes are implemented (Lepper et al. 2011) and the effectiveness lag may coincide with the implementation lag. The empirical results of the OECD countries (except for the U.S.A. and Great Britain) show that economic agents do not react to the government´s information about fiscal policy changes (Perotti 2004).

Figure 3: Development of the CNB prognosis - the actual year-over-year GDP growth



Source: CNB, prognoses of the actual year-over-year GDP growth (October 2007 - November 2013). Processed by us.

Based on empirical observations, the average time lag is not only longer than one quarter but it is also longer than or equals the total implementation lag. If the discretionary fiscal policy is to mitigate the impacts of an economic recession, the average total lag must be

shorter than the average recession duration. Since the average recession in the United States lasts eleven months from the peak to the bottom, according to Feldstein good luck is vital to deliver fiscal stimuli at the right time (Feldstein 2002). Similarly, Hoover (2011, p. 692-693) draws attention to the fact that due to the lengthy process of adoption of a discretionary fiscal policy, the recognition and implementation components together exceed the period of the average recession.

According to the International Monetary Fund, the average recession period for 21 developed countries during the years 1973 - 2000 represented 1.5 year (Kadeřábková and Žďárek 2006, p. 22). Periods of individual non-transformation recessions in the Czech Republic according to the Czech Statistical Office are showed in Table 4 while a recession is understood as a continuous drop in the actual quarterly GDP adjusted for seasonal variations in the quarter-over-quarter comparison[14] (Dubská and Kučera 2014, p. 7). The average economic recession period in the Czech Republic (factoring in the low information value of the average value calculation based on three observations only) amounts to three quarters according to that data. The implementation lag itself thus lasts one half of the recession period (or 43% of the recession length if we follow only the length of the implementation lag in respect of anti-crisis laws):

	Number of quarters
1997	3
2008–2009	3
2012–2013	6
Average recession length	4

Source: Dubská a Kučera 2014, p 35. Processed by us.

3.2 Neutral Impacts of the Implementation Lag

The economic development at the beginning of the new millennium, and especially the economic crisis after the year 2007, cushioned the critical perception of long implementation lags. In his studies published before the beginning of the American mortgage crisis, Feldstein stated that the discretionary fiscal policy during a recession is not possible due to the lags that are too long when compared to the recession length but the duration of the American financial crisis (2007 - 2009) allowed implementation of a stabilization policy (Feldstein 2008).

14 *A different understanding of a recession will yield different results; for instance, according to Howard (2011) the 2008-2009 recession in the Czech Republic lasted three quarters. We have selected the CNB results due to the consistent methodology (other authors state, for instance, only the data concerning the 1997 recession or only the data concerning recessions taking place in the new millennium).*

The problem of time lags is irrelevant where the discretionary fiscal policy reacts more to the long-term drop in demand than to the traditional economic cycle within which the slowdown of the economy takes less than one year as, for instance, in the case of Japan (Feldstein 2002, p. 6). According to Krugman (2009), the implementation lag does not represent an obstacle for the discretionary fiscal policy because recently after the end of a recession, the unemployment rate increases in a long run.[15] According to Krugman, stimuli for the economy are meaningful until interest rates are close to the zero threshold, i.e. until the central bank increases interest rates.

During the recession, the Czech National Bank reduced its two-week repo rate from 2.25 % in December 2008 to 0.05 % in November 2012. At the time of preparation of this study, the two-week repo rate remained unchanged for a period of 38 months. According to Krugman´s criterion, the total implementation lag lasting 7.2 months does not represent any problem for the Czech discretionary fiscal policy.

The above arguments focused on the consequences of the implementation lag in the discretionary fiscal policy as concerns the traditional, i.e. stabilizing concept. But if we use a wider definition of the discretionary fiscal policy as *a legal norm which changes the volume of the state budget income or expenditures outside the budgeting process,* the threat of pro-cyclic effects of the fiscal discretion due to the implementation lag will be reduced significantly. A majority (85%) of discretionary fiscal measures subject to our analysis represented the measures in respect of which the effort to stabilize the economic cycle has not been declared explicitly. The impact of fiscal discretion is absolutely separated from the economic cycle phase within the implementation of European legislation, for instance. A majority of discretionary fiscal measures thus worked as accidental shocks that could stimulate or restrain the economic growth unintentionally. In such cases, the length of implementation lags enables agents only to adjust their expectations concerning the future economic development and therefore it is neutral as concerns the cycle.[16]

3.3 Fiscal Placebo

Despite the fact that the implementation lag associated with the anti-crisis fiscal laws in the Czech Republic is significantly shorter than the implementation lag within other discretionary fiscal laws, only one anti-crisis law was implemented during the recession in response to it (Act no. 192/2012 Coll., an amendment to the act regulating investment stimuli). Seven other proposed measures were submitted already during the recession but they took effect only during the calendar quarters following the end of the recession.

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15 According to a report of the National Bureau of Economic Research (NBER).

16 The implementation lag may affect the growth of the economy also when it comes to those discretionary fiscal measures. An increase in the excise duty may serve as an example. In this case, the long implementation lag results in the forward buying effect that will be manifested through the GDP growth during the period immediately before the effective date of a relevant restrictive fiscal measure and through lower consumption (and thus potentially lower GDP growth) during the period immediately after the effective date of the relevant fiscal restriction. Thus the implementation lag would be neutral in view of the economic growth only if it is very short.

A draft amendment to the act regulating salaries of government officials was submitted after the end of the 2008-2009 recession.

This consequence of the implementation lag is not typical only for the Czech Republic. Bartlett (1992) presents a list of anti-crisis measures adopted in the United States during the years 1945 - 1992, which took effect only after the end of a relevant recession. According to him, this worsened the inflation, increased interest rates, and as a consequence, it worsened the course of next recessions. Therefore in this chapter we will present the concept of fiscal placebo. This concept allows us to explain why governments implement anti-crisis fiscal measures despite the fact that the recognition lag and especially the implementation lag cause the pro-cyclic impact of laws.

We define fiscal placebo as an anti-crisis discretionary fiscal measure the volume and actual impact of which on the economy are small and the main purpose of which is to demonstrate for the electorate the active efforts of fiscal policymakers aimed at cycle balancing during an economic recession. Let´s assume that economic policymakers know that they cannot affect the economic cycle due to the long time lag. But according to Drápal "a socially inacceptable situation may make politicians act in the situations within which they themselves would not act otherwise" (Drápal 2011, p. 108). Furthermore, Drápal calls this effect the syndrome of "it is necessary to do something" and presents, as an example, the reactions to unexpected situations such as the terrorist attacks taking place on 11 September 2001 or some laws that were adopted in Great Britain only to calm down the public.

While an economic crisis represents a risk for the politicians from ruling parties as to the probability of their being re-elected in the next elections, it represents an opportunity for the opposition. Empiric results show that during the 2008 - 2013 economic crisis voters "punished" ruling parties through national elections to the extent corresponding to the seriousness of the crisis experienced by the given country (Hernández and Kriesi 2014). In the countries that were affected by the crisis the most, traditional political parties collapsed (ibidem).

Therefore it is strategic for the politicians from opposition (or non-parliamentary) parties to emphasize the threat posed by a crisis and to point out the inactivity of the government. Opposition politicians are motivated to predict an economic crisis even before it is manifested in the data of statistical agencies in order to maximize the number of votes in the next parliamentary elections. The government´s demonstration of the ability to act is a reaction to the opposition criticism of the government´s policy, i.e. submission of a stabilization package that most likely will not mitigate the recession but, on the contrary, it will destabilize the economy due to the long implementation lag. Moreover, in the environment of budgetary deficits and government debts, a stabilization package deepens the imbalance of public finance and thus negatively affects expectations of investors who monitor the long-term consequences of the fiscal policy. If the implementation of a stabilization package deepens the deficit significantly, a drop in investments accompanied with a drop in the number of newly hired workers may occur (Tanzi 2012, p. 7). Unlike the opposition, ruling politicians (due to the costs associated with the implementation of a stabilization package) are motivated to deny any indications of an imminent crisis and to

calm down the public until publication of the statistical data.[17] Subsequently, a rational strategy involves demonstration of the ability to act through approval of discretionary fiscal measures the volume of which is minimal. Adoption of a package of anti-crisis laws may mitigate the negative expectations within the economy and, at the same time, reduce the potential electoral profit of the opposition. Thanks to the low volume of the measures, the pro-cyclic effect of the long implementation lag is neutralized and no destabilization of the public finance is imminent. Thus the fiscal measures show primarily the placebo effect - they do not influence directly the actual economy but only mitigate negative expectations (or support positive expectations).

The hypothesis of the fiscal placebo effect is empirically supported by the volume of anti-crisis measures in the countries affected by a crisis. The low volume of the stabilization package in the United States was criticised by Feldstein (2008); the impacts of the anti-crisis laws on the Czech state budget are summarized in Table 5.[18]

If the fiscal placebo concept is valid, the implementation lag length does not represent any serious problem. A relatively faster legislative process signalizes to voters the ability of economic policymakers to act, but the effectiveness following the end of a recession is associated with the full risk of the pro-cyclic effect. According to this concept, the date of the first reading in the Chamber of Deputies, when the media start to inform about a bill, is more important than the effective date. Thus as concerns adoption of anti-crisis laws, the implementation lag has the signalling function.

17 *In October 2008 (when the Czech economy already faced a recession according to the CSO data published later), the then minister of finance, Miroslav Kalousek, stated in an interview for daily newspaper Právo: "The right of the opposition to submit alternative proposals is absolutely legitimate. But it is absolutely irresponsible that the make efforts to abuse the current situation. Some statements of chairman Jiří Paroubek and the alleged need to create some rescue plans for the Czech Republic could be called scaremongering. I say it again: we are not to face any crisis. The fact is that the economic growth will be slower. Despite all possible problems, the Czech Republic will continue to become richer and to grow." (Kalousek 2008).*

18 *The estimated impacts of Act no. 326/2009 Coll. on the support for the economic growth and social stability, were supposed to, according to an explanatory report, amount to 51.3 billion CZK in 2009, 44 billion CZK in the year 2010, and to 44 billion CZK in the year 2011. But Act no. 362/2009 Coll. (Janota´s Package) cancelled, for instance, the proposed vehicle scrappage scheme and reduced the impacts of the original law in general.*

Table 5: Impacts of anti-crisis laws on the state budget

	Impact of anti-crisis laws on the state budget [billion CZK]				
	1997	**1998**	**2009**	**2010**	**2011**
Act no. 287/1997 Coll.	+0.1				
Act no. 289/1997 Coll.	+0.2	+16			
Act no. 216/2009 Coll.				-9.4	-3.6
Act no. 217/2009 Coll.			-0.1		
Act no. 221/2009 Coll.			-17		
Act no. 326/2009 Coll.			-31.8	-3.6	
Act no. 418/2009 Coll.				+7.126	
total	+0.3	+16	-48.9	-5.874	-3.6

Source: Explanatory reports to anti-crisis laws, the CNB database. Processed by us.
Note: expansive fiscal measures are marked with the minus sign. Other anti-crisis laws had no declared impact on the state budget in the explanatory report.

Conclusions

Within this study we followed the impacts of the implementation lag on the economic policy. Economists have always drawn attention to the risk of economic cycle destabilization due to long time lags. Increasing lengths of economic recessions and a change in the perception of objectives of discretionary fiscal policy during the last decade mitigate those arguments.

We have demonstrated, using the 1997 - 2013 empirical data concerning the Czech Republic, that despite the fact that stabilizing discretionary fiscal measures feature the total implementation lag that is significantly shorter than in case of other discretionary fiscal laws, anti-crisis laws have taken effect, with a single exception, always only after the end of the recession to which they were supposed to react. Moreover, the volume of the funds used by the government to achieve stabilization is relatively low, which is determined by a narrow space determined for fiscal discretion due to the high share of mandatory expenditures and primarily due to the long-term instability of public finance.

Therefore and based on the results, we have proposed the fiscal placebo concept pursuant to which the implementation lag fulfils only the signalling function. Implementation of stabilization packages represents only a strategic decision of the government the position of which is destabilized during a recession. In such a case, a long implementation lag does not have to have a negative effect but, on the contrary, it may mitigate negative senti-

ments within the economy thanks to its informative function. Professor Peltzman[19] points out potential worsening of the economic situation due to a reduction in the private consumption caused by the expected increase in taxes in future. Fiscal *placebo* that may have, in compliance with the medical interpretation of the term *placebo* both a positive and neutral effect, could therefore become the fiscal *nocebo*. Provided that the fiscal placebo assumption is valid, a long implementation lag does not have to represent a problem.

If the fiscal placebo concept is not valid (under the conditions of the Czech economy), an answer to the alternative question should be sought: How to reduce the implementation lag length? At this point we deem it necessary to emphasize that *in no case* the conclusions of our study are aimed to provide any arguments in favour of shortening of the legislative process. We are aware of the potentially inverse relation between the speed at which laws are adopted on one hand and their quality on the other hand. Based on a detailed analysis of the implementation lag length and its structure, we believe that no modification of the legislative process can contribute significantly to a faster implementation of discretionary fiscal policies. As concerns deliberate fiscal discretion, the objective of which is to stabilize the economy, the pro-cyclic impact of fiscal measures cannot be excluded. Under such circumstances the implementation lag can be prevented only through elimination of adoption of deliberate discretionary fiscal measures in favour of automatic stabilizing factors and other non-intervention tools of the economic policy.

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References

AMBRIŠKO, R., V. AUGUSTA, D. HÁJKOVÁ et al. (2012) *Fiscal Discretion in the Czech Republic in 2001–2011: Has It Been Stabilizing?* CNB Research and Policy Notes, č. 1.
AUERBACH, A. (2005) The Effectiveness of Fiscal Policy as Stabilization Policy. *Bank of Korea International Conference on the Effectiveness of Stabilization Policies*. 27. 5. Seoul.
BARTLETT, B. R. (1992) If It Ain't Broke, Don´t Fix It. *The Wall Street Journal.* 2. 12.
BLINDER, A. S. (2004) *The Case Against the Case Against Discretionary Fiscal Policy.* Working Paper 100, Princeton University's Center for Economic Policy Studies (CEPS). Dostupné z http://www.princeton.edu/ceps/workingpapers/100blinder (citováno 6. 10. 2014).
BOHÁČ, R. (2011) *Legislativní proces: (teorie a praxe).* Praha: Tiskárna Ministerstva vnitra, 547 s.

19 E-mail correspondence with professor Peltzman during the period from 28 November 2014 until 5 December 2014.

CLAESSENS, S. and A. KOSE (2009) What Is a Recession? *Finance & Development*, roč. 46, č. 1, s. 52–53. Dostupné z: http://www.imf.org/external/pubs/ft/fandd/2009/03/basics.htm
ČAPEK, J. (2007) Nejistota vybraných makroekonomických dat zemí Visegrádu. In Slaný, A. a kol. *Faktory konkurenceschopnosti* (Komparace zemí V-4). Brno: Masarykova univerzita, s. 179–189, 10 s. CVKS.
ČSÚ (2012) *Recese, deprese – Metodika*. Dostupné z: http://www.czso.cz/csu/redakce.nsf/i/recese_deprese
ČSÚ (2015) Politika revizí ČSÚ.
DRÁPAL, J. (2011) Stav legislativní nouze. In: WINTR, Jan a Marek ANTOŠ. *Parlamenty: funkce, kultura, procedury*. Vyd. 1. Praha: Leges, s. 105–117.
DUBSKÁ, D. and L. KUČERA (2014) *Tendence a faktory makroekonomického vývoje a kvality života v České republice v roce 2013*. Praha: Český statistický úřad, 70 s. Dostupné z: http://www.czso.cz/csu/2014edicniplan.nsf/publ/320192-14-r_2014
FELDSTEIN, M. (2002) *The Role for Discretionary Fiscal Policy in a Low Interest Rate Environment*. Working Paper 9203, National Bureau of Economic Research (NBER).
FELDSTEIN, M. (2008) The Stimulus Plan We Need Now. *The Washington Post*. 30. 10.
FISCHER, J. (2004) Stabilita čtvrtletních odhadů užití HDP. *Politická ekonomie*, roč. 52, č. 3, s. 344–354.
FRIEDMAN, M. (1948) A Monetary and Fiscal Framework for Economic Stability. *The American Economic Review*, roč. 38, č. 3, s. 245–264.
GRUSKY, D., B. WESTERN and Ch. WIMER (2011) *The great recession*. New York: Russell Sage Foundation, xi, 329 s.
HERNÁNDEZ, E. and H. KRIESI (2014) The electoral consequences of the financial and economic crisis in Europe. Florence: European University Institute.
HOOVER, K. D. (2011) *Applied intermediate macroeconomics*. New York: Cambridge University Press, xl, 899 s.
HOWARD, G., R. MARTIN and B. A. WILSON (2011) Are Recoveries from Banking and Financial Crises Really So Different? *International Finance Discussion Papers*, Working Paper Nubmber 1037 (Washington: U. S. Federal Reserve System).
JÍLEK, J. (2013) *Finance v globální ekonomice II: Měnová a kurzová politika*. 1. vyd. Praha: Grada, 557 s.
JOVANOVSKI, T. and M. MURIC (2011) The Phenomenon of Lag in Application of The Measures of Monetary Policy. *Ekonomska istraživanja*, roč. 24, č. 2, s. 154–163.
KADEŘÁBKOVÁ, A. and ŽĎÁREK, V. (2006) *Makroekonomická analýza*. Vyd. 1. Praha: Vysoká škola ekonomie a managementu, 2006, 293 s.
KALCKREUTH, v. U. and G. WOLFF (2007) T*esting for contemporary fiscal policy discretion with real time data*. Frankfurt am Main: Dt. Bundesbank, 25 s.
KALOUSEK, M. (2008) Interview. In: *Právo*. 7. 10.
KEYNES, J. M. (2006) *General Theory Of Employment, Interest And Money*. Atlantic Publishers & Dist, 400 s.
KRUGMAN, P. (2009) How Late is too Late? *The New York Times*. 27. 1.
KYDLAND, F. and E. C. PRESCOTT (1977) Rules Rather than Discretion: The Inconsistency of Optimal Plans. *Journal of Political Economy*, roč. 85, č. 3, s. 473–492.
LEEPER, E., T. WALKER and S-CH. S. YANG (2008) *Fiscal Foresight: Analytics and Econometrics*. Working Paper 14028, National Bureau of Economic Research (NBER).
LIPOVSKÁ, H., NĚMEC, D. and J. FISCHER (2016) Implementační zpoždění diskreční fiskální politiky. *Politická ekonomie*. V tisku.

MARTHINSEN, J. E. (2008) *Managing in a global economy: demystifying international macroeconomics*. Mason, OH: Thomson South-Western, xx, 746 s.
MCEACHERN, W. A. (2014) University of Connecticut. *Economics: a contemporary introduction.* 10e. 800 s.
PEROTTI, R. (2005) *Estimating the effects of fiscal policy in OECD countries.* Discussion paper 4842. CEPR. Londýn.
SIXTA, J. (2014) Po 20 letech dochází k revizi národních účtů. *Statistika & M*y, roč. 4, č. 7–8, s. 6–7.
SLANÝ, A. (2003) *Makroekonomická analýza a hospodářská politika*. Vyd. 1. Praha: C. H. Beck, XIII, 375 s.
ŠAROCH, S., P. PAVELEK and M. ANDRLE (2003) *Rehabilitujeme fiskální makroekonomickou stabilizaci?* Working Paper 1, Institut pro ekonomickou a ekologickou politiku a Katedra hospodářské politiky.
TANZI, V. (2012) *Realistic Recovery: Why Keynesian Solutions Will Not Work.* Londýn: POLITEIA.
TAYLOR, J. B. (2000) Reassessing Discretionary Fiscal Policy. *Journal of Economic Perspective*, roč. 14, č. 3, s. 21–36.
TAYLOR, J. B. (2009) The Lack of an Empirical Rationale for a Revival of Discretionary Fiscal Policy. *American Economic Review*, roč. 99, č. 2, s. 550–555.
THOMAS, L. B. (2005) *Money, banking, and financial markets*. Mason, Ohio: Thomson/South-Western, XXII, 618 s.
VACKOVÁ, P. (2014) Evaluation of the Ministry of Finance's Forecast History. *Statistika*. 2014, roč. 94, č. 2, s. 18–35. Dostupné z: http://www.czso.cz/csu/2014edicniplan.nsf/engpubl/320197-14-eng_q2_2014
ZEMAN, M. (2001) *Zpráva o stavu realizace Programového prohlášení a o činnosti vlády ČR od března 2000 do současnosti.* Stenoprotokol, 37. schůze, 3. volební období. Dostupné z: http://www.psp.cz/eknih/1998ps/stenprot/037schuz/s037223.htm

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