





# “Inflation targeting and central bank independence: Do legal origins play a role?”

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# INFLATION TARGETING AND CENTRAL BANK INDEPENDENCE: DO LEGAL ORIGINS PLAY A ROLE?

## Abstract

Central bank independence is widely recognized as a precondition for launching inflation targeting, but there is no empirical support for this. While actual independence of monetary institutions is key for the effective implementation of this monetary regime, formal reforms have been implemented extremely unevenly both over time and across countries. Legal origins may affect different institutional paths of central bank independence strengthening during the adoption of inflation targeting across countries. Applying a t-test, panel regression, and difference-in-difference based event-study analysis, we show a strong statistically significant distance between levels of central bank independence across Common Law and Civil Law countries with inflation targeting. Civil Law countries perform with higher central bank independence; they are more likely to strengthen it before inflation targeting launch and continue to reform the central bank's legislation toward greater autonomy after the introduction of this monetary regime. These results confirm that Legal origins matter for central bank independence. More formally oriented Civil Law coexists with relevant legislation changes. While less formally oriented Common Law may not require changes in legislation to implement a monetary regime grounded on central bank independence, in essence. Such results help explain weak empirical arguments for strengthening central bank independence as a precondition for inflation targeting, given the structural heterogeneity of countries determined by legal tradition.

## Keywords

central banking, central bank independence, inflation targeting, monetary policy, legal origins, legal tradition, institutions

## JEL Classification

E02, E58, F15, F45

## INTRODUCTION

The literature on monetary policy frameworks widely recognizes that central bank independence (CBI) is an important prerequisite for the successful adoption and credibility of inflation targeting (Bernanke & Mishkin, 1997; Hammond, 2012). Even more, Debelle et al. (1998) outline that central bank independence is the first important requirement for inflation targeting to be efficient, while the second is priority of a single inflation target. Despite this theoretical consensus, empirical evidence consistently reveals a paradoxical landscape: there are significant differences in the formal level of application of CBI within the inflation targeting strategy, and many countries adopt this regime without prior legislative strengthening of the status of their central banks. This disconnect suggests that the "precondition" of formal CBI is not universally applicable, yet the factors driving this heterogeneity remain underexplored.

A critical dimension often overlooked in this discourse is the role of legal traditions – specifically the divide between Common Law and Civil Law systems – in shaping how institutional reforms are executed in terms of changes in formal legislation vs functional changes in sub-

stance. The research problem, therefore, centers on two interrelated issues: the empirical disconnect and the role of Legal Origins.

In terms of empirical shortcomings, the question is related to the discrepancies between theoretical validations of CBI strengthening as a prerequisite for IT. So, why do many countries fail to strengthen formal CBI during the IT launch despite theoretical predictions? In terms of the role of the Legal tradition, the question is related to the institutional factor of such discrepancies. To what extent do legal traditions explain the divergent paths of CBI strengthening, where some countries rely on formal legislative mandates (Civil Law) while others operate through implicit political agreements, monetary policy framework changes, and corresponding autonomy of central banks (Common Law)?

This study addresses these gaps by testing the hypothesis that Legal Origins serve as a fundamental determinant of the institutional evolution of central banks. By applying a difference-in-differences approach and event-study analysis, the research investigates whether the perceived “weak link” between IT and CBI is, in fact, a reflection of structural heterogeneity dictated by legal tradition. The findings contribute to the resolution of this problem by demonstrating that: Civil Law jurisdictions exhibit more pronounced legislative reforms both before and after IT adoption to “protect” the new monetary regime through formal changes in legislation; In Common Law jurisdictions, the lack of formal CBI changes suggests that IT adoption relies on informal political consensus and the inherent flexibility of the legal system, where substance (actual autonomy) prevails over form (written law); The widening gap in CBI levels between these groups highlights that institutional “preconditions” are not monolithic but are contingent upon a nation’s legal and political-economy framework.

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## 1. LITERATURE REVIEW

CBI and a direct set of inflation goals are recognized as a millennium-important paradigm shift in monetary policy-making. The nature of IT is well described in literature (Debelle et al., 1998; Svensson, 1999; Hammond, 2012). IT is evolving, and there are no signs of decline in its popularity (Niedźwiedzińska, 2021). And contributions of higher CBI to lower inflation are recognized (Romelli, 2022, 2024; Dincer et al., 2024; Athanasopoulos et al., 2025).

According to the underlying literature, IT strengthens the CBI, especially in countries with emerging markets (Mishkin & Schmidt-Hebbel, 2002). In fact, such academic consistency has created the preconditions for the emergence of an established discourse, under which inflation targeting and central bank independence are considered in an interrelated context. Parkin (2014) outlines that CBI and IT are responsible for a substantial decline in inflation and potential GDP variability in a sample of 26 developed countries. Minea et al. (2021) show positive effect of inflation targeting launch on quality of institutions. On the other hand, Jung et al. (2025), using the example of 155 countries, show that CBI has

a significant impact on monetary discipline and, accordingly, on achieving trust, but this is not significant in countries with inflation targeting. In turn, Poghosyan and Imam (2025) state that combining inflation targeting with CBI did not yield better inflation results compared to alternative monetary arrangements. Alpanda and Honig (2014) demonstrate that CBI does not improve inflation performance, rather inflation declined in countries with low CBI, mostly due to improving fiscal situations. However, Morozumi et al. (2020) point out that low-developed countries demonstrate worse results in terms of IT performance due to weak central bank instrumental independence caused by fiscal dominance, which aligns with Debelle et al.’s (1998) arguments of CBI priority requirements for successful IT implementation. In the same time, Mukherjee and Singer (2008) demonstrates that probability of IT launch strongly related to narrow gap between central bank’s and government inflation preferences as well as to combination of right-learning government and central bank without regulatory and supervision responsibility, that is more in line with higher CBI (Romelli (2022)). Such empirical conclusions can be interpreted as evidence of more complex relations between CBI, IT, and inflation performance.

There are studies that analyze the preconditions for introducing inflation targeting. IMF (2005) and Battini and Laxton (2007) note that the preconditions for introducing inflation targeting are not fully met, and the independence of central banks can vary significantly across countries transitioning to this monetary regime, despite Debelle et al. (1998) stressing the fundamental requirements of CBI for efficient IT. Freedman and Otter-Robe (2009) and Schmidt-Hebbel and Carrasco (2016) note the need for minimum preconditions. This allows for a broad interpretation of the sufficient level of formal CBI needed for IT adoption. For example, Agénor (2002) emphasizes the need for a price stability mandate, which gives the priority of achieving the inflation target on an institutionally significant and formalized basis. Mishkin and Schmidt-Hebbel (2002), on the other hand, note that for 27 inflation-targeting countries, the link between the choice of monetary regime and the level of central bank independence is weak. At the same time, they state that the type of independence is important. Instrument independence is more significant. Goal independence may provide the opposite effect. The priority of instrument independence is also confirmed in Samarina and De Haan (2014). They state that CBI corresponds more closely to soft IT. Restrictions on government financing are also considered. Carare et al. (2002) and Carare and Stone (2006) find that this is only important for countries with emerging markets. However, a number of studies emphasize that the price stability mandate, as well as the ability to choose an inflation target, are important for IT (Fouejieu, 2017; Lucotte, 2010; Minea & Tapsoba, 2014).

It is important to note studies that highlight the drivers of strengthening CBI. For example, Romelli (2024) links reforms aimed at strengthening formal independence to two factors. These are negative inflationary experiences and globalization with its increasing financial openness. In other words, such reforms are a response to the inflationary consequences of weak macroeconomic policy institutions and increased risks of vulnerability to reversals in global capital flows. Past inflation, poor macroeconomic policy, crises, and openness push countries to increase CBI, as shown in several studies (Bodea & Hicks, 2015; Romelli, 2022, 2024). Cooperation with the IMF and membership in a

currency union also have a positive effect on the likelihood of reforms aimed at strengthening the CBI (Dincer & Eichengreen, 2014; Romelli, 2022, 2024). These findings are consistent with empirical tests of inflationary and crisis experiences, after which countries tend to pursue structural reforms, with inflation targeting being a key one (Hu, 2006). Another perspective on this issue is Berggren et al.'s (2014) social trust view. Reforms aimed at strengthening CBI take place in countries with medium levels of social trust. In countries with low levels of such trust, they are unlikely to occur, and in countries with high levels, there is no need for formal reforms. Opposite to strengthening CBI, there are policy reforms that reduce independence or undermine it after reform (Acemoglu et al., 2008). When formal de-delegation reforms are costly, there is the politicization of central bank governors' appointments (Bodea & Garriga, 2022; Ioannidou et al., 2023).

Also, literature clearly articulates the issue of the relationship between political and legal factors and the real substance of central bank independence. The rule of law plays a crucial role here, as it is empirically confirmed by Nurbayev (2017).

Some papers show the influence of the Legal origins on CBI. Dincer and Eichengreen (2014) were among the first to point out that in countries with the Common Law, there was no strengthening of central bank independence during the period of monetary institutions reforms. Koziuk (2025) shows no evidence of strong strengthening of CBI in Common Law countries, and that the combination of below-average inflation and below-average CBI statistically corresponds to belonging to the Common Law tradition. Although the channels of relation between the Legal origins and the anti-inflationary effectiveness of central banks remain a subject of debate, the positive impact of the quality of the judiciary on the convergence of the formal and actual independence of monetary institutions should be taken into account. Hayo and Voigt (2008) and Tridimas (2011) confirm the positive relationship between judicial independence and the proxy for the actual independence of central banks, and the lack of a relationship between the former and formal independence. La Porta et al. (2004) show that Common Law countries perform better in terms of judicial independence, which also

positively affects better governance (La Porta et al., 1999). Based on this, it can be assumed that Legal origins may influence the nature of institutional relations and how political power is organized with informal checks and balances. The Legal origins may also influence the ability to uphold implicit political agreements, similar to how it affects the protection of property rights and the corresponding consequences for the allocation of political and economic power (La Porta et al., 2008).

So, the literature establishes that CBI is a critical paradigm shift in monetary policy and is traditionally viewed as a non-negotiable precondition for the effective implementation and credibility of inflation targeting. However, some empirical disconnect between IT launch and corresponding reforms of the central bank's legislation is challenging a rigorous theoretical approach to inflation targeting. Recent literature suggests that Legal Origins significantly influence institutional paths. So, differences in legal traditions may affect divergent paths in the central bank's institutional adjustments to innovations in monetary policy implementation.

## 2. AIM OF THE PAPER

The paper aims to evaluate the institutional evolution of central banks following the adoption of IT, with a specific focus on the heterogeneous paths of strengthening the CBI. While conventional wisdom suggests that formal CBI is a prerequisite for IT, this study seeks to resolve the empirical puzzle of why many nations adopt this regime without prior legislative strengthening. By integrating the Legal Origins approach into the analysis of monetary institutions, this paper aims to: determine whether the adoption of IT catalyzes formal legislative changes in CBI; assess the extent to which the distinction between Common Law and Civil Law systems explains the variance in how countries implement central bank autonomy preparing to IT launch; provide empirical evidence using a difference-in-differences and event-study methodology to show that while Civil Law countries rely on formal legislative changes, Common Law countries may achieve substantive autonomy through informal political consensus. Ultimately, the study aims to demonstrate that institutional

“best practices” in monetary policy are not universal but are fundamentally conditioned by a country's underlying legal and historical framework.

## 3. METHODOLOGY

The initial stage of this study is the selection of inflation-targeting countries (Appendix A). The list of countries and the year of introduction of this monetary regime are based on central bank sources and prior studies (Niedźwiedzińska, 2021; Petrevski, 2023). The division of countries into groups of Common law and Civil law is provided in accordance with La Porta et al. (2008).

The empirical component of the methodology consists of two parts.

At the first stage, a *t*-test is applied for statistical assessment of the effects of central banks' status reaction on the introduction of inflation targeting (treatment). The year of inflation targeting introduction is defined as *t*. Subsequently, changes in the formal status of central banks are analyzed in the  $(t - 7) - (t + 7)$  window across the Legal origin groups. This approach was applied to identify the statistical significance of the difference in the mean values of the CBI index across country groups. A statistically significant *t*-test indicates differences in mean CBI between groups/time windows. Next, the index values in cases  $(t - 7) - (t + 1)$  and  $(t - 7) - (t + 7)$  are compared across country groups. In the first case, statistically significant differences will indicate that central bank reforms took place at a time close to the transition to a new monetary regime. In the second case, they will indicate that reforms were carried out during the implementation of this monetary regime.

In the second stage, we apply an econometric assessment of the significance of factors theoretically associated with CBI strengthening. The econometric testing is based on panel data (country-year) for the period 1985–2023, covering the CBI indicator and characteristics of the monetary regime and institutional setup. The selected period allows for a certain lag before the first introduction of inflation targeting to assess the likely changes in the status of pioneer central banks. The dependent variable is the *cbie\_index* (Romelli, 2022, 2024),

denoted as  $CBI_{i,t}$  for country  $i$  in year  $t$  (up to 158 countries). In the econometric estimation process, the key explanatory variable is the binary indicator of inflation targeting  $IT_{i,t}$  (1 – from the year of introduction, and 0 – in other years).

To test the heterogeneity of the impact of the transition to inflation targeting depending on the Legal Origins, the corresponding binary variable is a time-invariant characteristic at the country level:  $LO_i = 0$  for Common law countries and  $LO_i = 1$  for Civil law countries. Based on this variable, an interaction term  $IT_{i,t} \times LO_i$  is applied, which allows for assessing the differences in the IT effect between the two legal traditions. Control variables are the next: trade openness – imports to GDP (World Bank data); financial development index (IMF data); KOF index (ETH Zurich data); proxy for EU membership (0 – no EU membership, 1 – from the year of EU membership). The selected control variables correspond to theoretical ideas about the drivers of central bank reforms, in particular, the impact of openness, financial sector development, and membership in a currency union (Dincer & Eichengreen, 2014; Bodea & Hicks, 2015; Romelli, 2022, 2024).

The econometric strategy is based on the Two-Way Fixed Effects (TWFE) model, which corresponds to the difference-in-differences logic in panel data and allows controlling all time constant differences between countries, as well as shocks/trends common to all countries in a given year. The basic specification of the model is as follows:

$$CBI_{i,t} = \beta_0 IT_{i,t} + \beta_1 IT_{i,t} \cdot LO_i + \alpha_i + \gamma_t + \varepsilon_{i,t}, \quad (1)$$

where  $\alpha_i$  – country's fixed effects,  $\gamma_t$  – time fixed effects,  $\varepsilon_{i,t}$  – stochastic residual. In such specification,  $\beta_0$  is interpreted as a conditional  $IT$  effect for the Common law group (because then  $LO_i = 0$  interaction term is equal to zero), when  $(\beta_0 + \beta_1)$  as conditional  $IT$  effect for the Civil law group. Coefficient  $\beta_1$  measures a difference in  $IT$  effects between Civil law and Common law groups.

To minimize bias risks related to macroeconomic and structural characteristics as time-varying factors in robust specification, the vector of control

variables  $X_{i,t}$  is added, which includes:  $Imp_{i,t}$  – import to GDP;  $FinDev_{i,t}$  – financial development index;  $KOF_{i,t}$  – globalization index, and a binary variable of EU membership  $EU_{i,t}$ : 1 – yes, 0 – no.

Augmented model estimated as:

$$CBI_{i,t} = \beta_0 IT_{i,t} + \beta_1 IT_{i,t} \cdot LO_i + X'_{i,t} \theta + \alpha_i + \gamma_t + \varepsilon_{i,t}, \quad (2)$$

where  $X_{i,t} = \{Imp_{i,t}, FinDev_{i,t}, KOF_{i,t}, EU_{i,t}\}$ ;  $\theta$  – variables vector's coefficient that shows how  $CBI_{i,t}$  is changing in response to control change on 1, ceteris paribus.

The estimation is based on the least squares method after within-transformation, which eliminates fixed country and year effects. Standard errors are calculated as cluster-robust by country, which allows for the fixing of heteroscedasticity and serial correlation of residuals within a country over time. This approach is standard and helps address heteroskedasticity and within-country autocorrelation.

The identification of parameters  $\beta_0$  and  $\beta_1$  in the TWFE-DiD setting relies on the assumption of parallel trends: in the absence of a transition to inflation targeting, the average trajectories of  $CBI_{i,t}$  in countries that have adopted IT and in control group countries (countries that do not apply IT in the relevant year, including not-yet-treated and never-treated) would develop similarly after taking into account country and annual fixed effects. Given that IT adoption occurs in different years (staggered adoption), event-study analysis is additionally used to assess the dynamics of the  $CBI_{i,t}$  indicator before and after the year of IT adoption and to verify the absence of systematic deviations in the pre-reform period (pre-trends). Empirical estimates are based on an unbalanced panel: the baseline specification without controls (1) uses 4,692 observations (129 countries), while the robust specification with controls (2) uses 3,910 observations (118 countries). The reduction in the number of countries and observations in the extended model is due to omissions in the control variables. All results are interpreted as conditional estimates of the relationship between IT and  $CBI_{i,t}$  within the TWFE-DiD framework; the cor-

rectness of the causal interpretation depends on the fulfillment of the identification assumptions presented.

## 4. RESULTS

The introduction of inflation targeting is theoretically perceived as a factor in central bank reforms aimed at strengthening their independence.

Denoting the year of introduction of this monetary regime as  $t$  and analyzing changes in the *cbie* index (Romelli, 2022, 2024) in the time window  $(t - 7)$ - $(t + 7)$  allows us to see the following. First, the levels of CBI in the countries with different Legal Origins vary significantly. Second, changes in the value of the index are present in both groups of countries, but in the group of countries with Common law, they are insignificant and do not precede the introduction of a new monetary regime, while in the group of countries with Civil law, they are more pronounced, occur before the transition to inflation targeting, and continue thereafter (Figure 1).

There is clearly a significant difference in the status of central banks' adjustments in response to the introduction of inflation targeting over three periods for comparison. The null hypothesis of the similarity of the mean is rejected with statistical significance in all three cases. Statistically significant difference of CBI level in the countries that launched IT has taken place already before the  $t$  year. The  $t$ -test confirms this. There is a big statistical difference in CBI levels across Common Law and Civil Law countries on  $t - 7$  ( $p = 0.00269$ ), and the gap is widening. On the  $t + 1$ , the  $p = 0.001$ , and

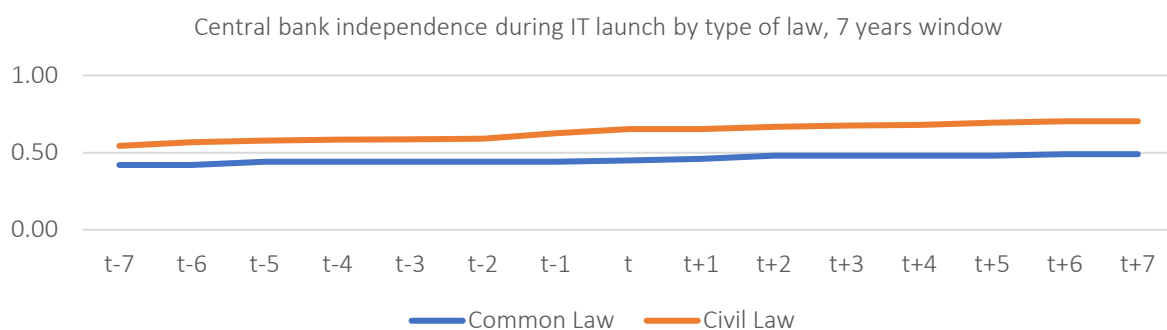
on the  $t + 7$ , the  $p = 0.0001$ . The results are similar to those of a large sample, as in Koziuk (2025).

Differences in the CBI strengthening across Legal Origins country groups are becoming more vivid, given the temporal dimension of IT launch. In  $(t - 7)$  vs  $(t + 1)$  case, testing pre-adoption adjustment, meaning the reaction of the countries in a theoretically predicted way by strengthening CBI in response to IT launch. In  $(t - 7)$  vs  $(t + 1)$  case, testing post-adoption adjustment, meaning that CBI is strengthened ex post in accordance with the IT implementation experience as the theory predicts. There are statistically significant differences in how countries with different legal traditions react to CBI strengthening over time. First, the null hypothesis of the similarity of the mean is rejected in the case of Civil law countries (for  $(t - 7)$  vs  $(t + 1)$  the  $p = 0.011$  and for  $(t - 7)$  vs  $(t + 1)$  the  $p = 0.0009$ ) and not rejected for Common law countries (for  $(t - 7)$  vs  $(t + 1)$  the  $p = 0.2624$  and for  $(t - 7)$  vs  $(t + 1)$  the  $p = 0.1$ ) on both time horizons. Second, in both groups, the  $t$ -statistic declines in time, confirming changes in central bank legislation after the switch to the new monetary regime. However, such changes are more prominent in the countries with Civil law.

### 4.1. Panel-data analysis and event-study in a difference-in-difference frame

Econometric analysis helps obtain more complete findings of the central bank's status changes in response to the IT launch. Results help better understand the difference in the central bank reforms' institutional paths during IT launch across Common law and Civil law countries. Table 1 presents the

Source: Authors' calculations based on information about years of IT launch from each central bank and Niedźwiedzińska (2021), Petrevski (2023). Index is from Romelli (2022, 2024).



**Figure 1.** Central bank independence during IT launch by type of law, 7-year window

**Table 1.** Test results of the base (1) and augmented (2) TWFE models

Variable	1			2		
	Coefficient	p-value (SE)	t-statistics	Coefficient	p-value (SE)	t-statistics
IT	-0.057231	0.022784	-2.511855	-0.080889	0.026732	-3.025894
IT*LO	0.102025	0.030798	3.312758	0.110273	0.031107	3.544981
Imp				0.000743	0.000469	1.585355
FinDev				0.061306	0.091579	0.669441
KOF				0.000384	0.001006	0.382041
EU				0.143387	0.027333	5.245963

results of econometric estimation of the base equation (1) and the augmented equation (2).

In the base TWFE model with interaction term  $IT_{i,t} \times LO_i$  (1), estimate  $\beta_0$  reflects the conditional effect  $IT$  for Common law countries, while  $\beta_0 + \beta_1$  – for Civil law countries.

Estimated results confirm statistically significant heterogeneity: in the first specification, the coefficient with  $IT_{i,t}$  is negative and statistically significant ( $\beta_0 = -0.057$ ;  $SE = 0.0228$ ), while the interaction term coefficient of  $IT_{i,t} \times LO_i$  is positive and significant ( $\beta_1 = -0.102$ ;  $SE = 0.0308$ ). Implicit effect of variable  $IT$  for Civil law countries is  $\beta_0 + \beta_1 \approx -0.057 + 0.102 = 0.045$ , meaning that for this group of countries,  $IT$  is associated with an increase in  $CBI_{i,t}$  approximately on 0.045 points compared to the basic level after accounting for fixed effects.

This means that the relation between  $IT_{i,t}$  and  $CBI_{i,t}$  substantially differs across two legal traditions: for Common law countries it is conditionally negative, while for Civil law countries it is substantially stronger, reaching a positive level.

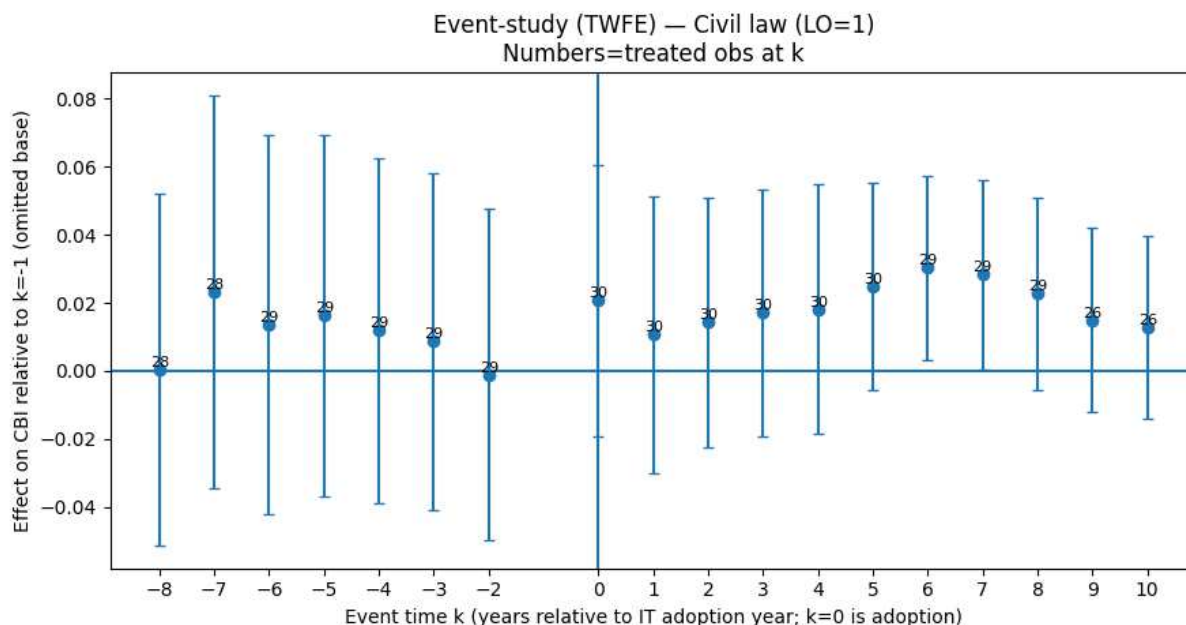
Such a pattern of relations between variables is replicated in the specification with controls. Negative estimation for Common law and positive estimation of the difference between Civil law and Common law: ( $\beta_0 = -0.081$  ( $SE = 0.0267$ ),  $\beta_1 = 0.110$  ( $SE = 0.0311$ )). Implicit effect for Civil law countries is  $\beta_0 + \beta_1 \approx -0.081 + 0.110 = 0.029$ , which is positive.

The reduction in the number of observations in the extended model is due to omissions in the control variables and, accordingly, a narrowing of the effective panel; therefore, the interpretation of robustness takes into account the change in the composition of the sample. Also, in the second model, the control

variables have a theoretically correct sign at the coefficient and are statistically significant. At the same time, while the proxies for openness and financial development have a weak effect on the dependent variable, the proxy for EU membership has a strong effect, as can be seen from the difference in the values of the coefficients (Table 1). In the first approximation, the results obtained confirm the hypothesis about the critical importance of the Legal Origins in explaining the differences in the central bank's institutional paths related to inflation targeting.

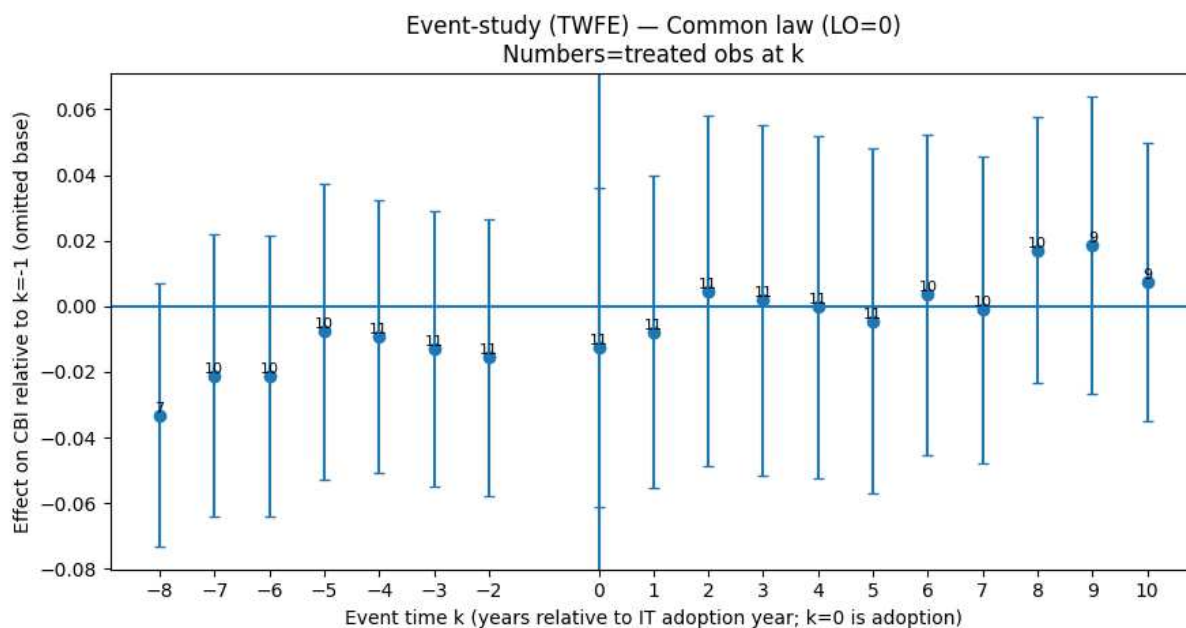
For estimation of the parallel trend assumption and analysis of the dynamic after IT launch, the event-study method was applied for the period of  $k \in [-8; 10]$  years relative to the year of IT launch ( $IT(k=0)$ ) (Figures 2-5). Basic category is  $k = -1$ . All coefficients are interpreted as deviations of  $CBI_{i,t}$  from pre-launch year  $k = -1$  if country or fixed effects are in place. Figures show 95% confidence intervals; near the points, the number of treated observations in each  $k$ , that is a diagnostic of estimation robustness.

In Figure 2 (countries with Civil law), estimates for pre-launch periods  $k < 0$  generally do not show a systematic deviation from zero, which visually supports the assumption of no sharp pre-trends in the years immediately preceding the switch to the IT. On the other hand, most values are in the positive zone, which means that reforms are likely to have been implemented before the introduction of inflation targeting, even if this does not mean direct reforms for inflation targeting. There is also a significant increase in the level of estimates in the year of the IT launch. In the post-period, this group of countries is characterized by further reforms of the status of central banks, which is consistent with the idea of strengthening their status through the implementation of inflation targeting, even if this did not happen before the introduc-



**Figure 2.** Event-study (TWFE) – Civil law countries (without controls)

Source: Authors' elaboration.



**Figure 3.** Event-study (TWFE) – Common law countries (without controls)

tion of this monetary regime. These results fully correspond to the *t*-test data. Reforms aimed at strengthening central bank independence, in accordance with IT implementation experience, confirm the validity of the argument about its importance for inflation targeting, even if this deviates from the theoretical assumption about the

precondition for its introduction. However, this clearly works only for countries with Civil law.

For Common law countries, the situation is different. In Figure 3, the estimates are closer to zero and may be negative for some periods. The confidence intervals are wider. At the same time, the results in

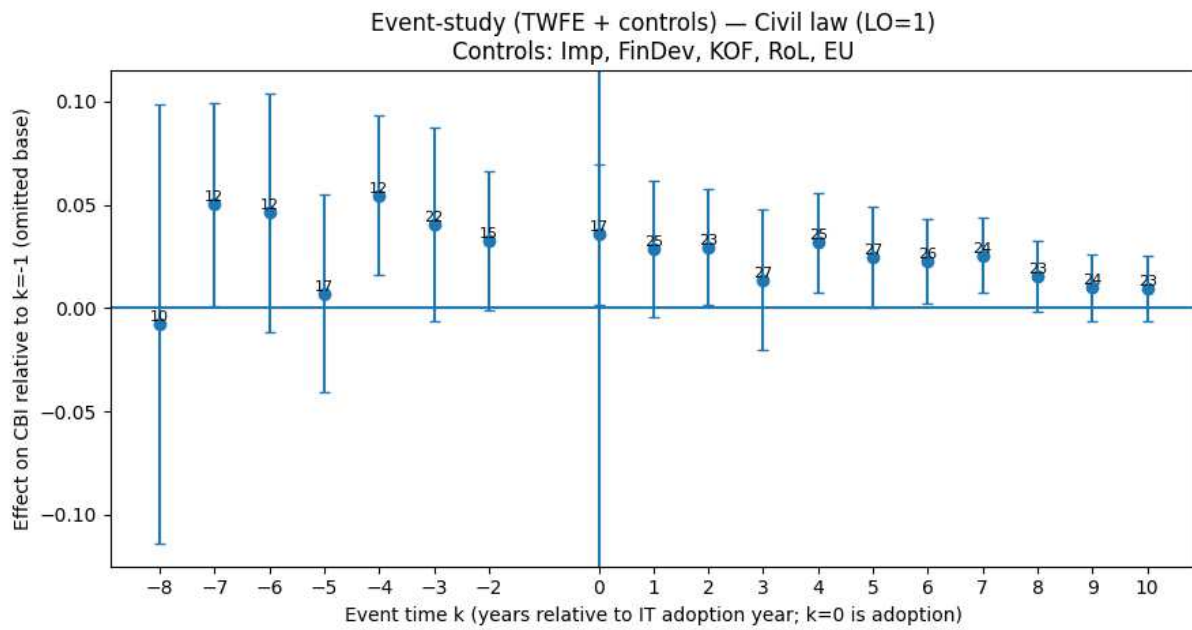


Figure 4. Event-study (TWFE + controls) – Civil law countries

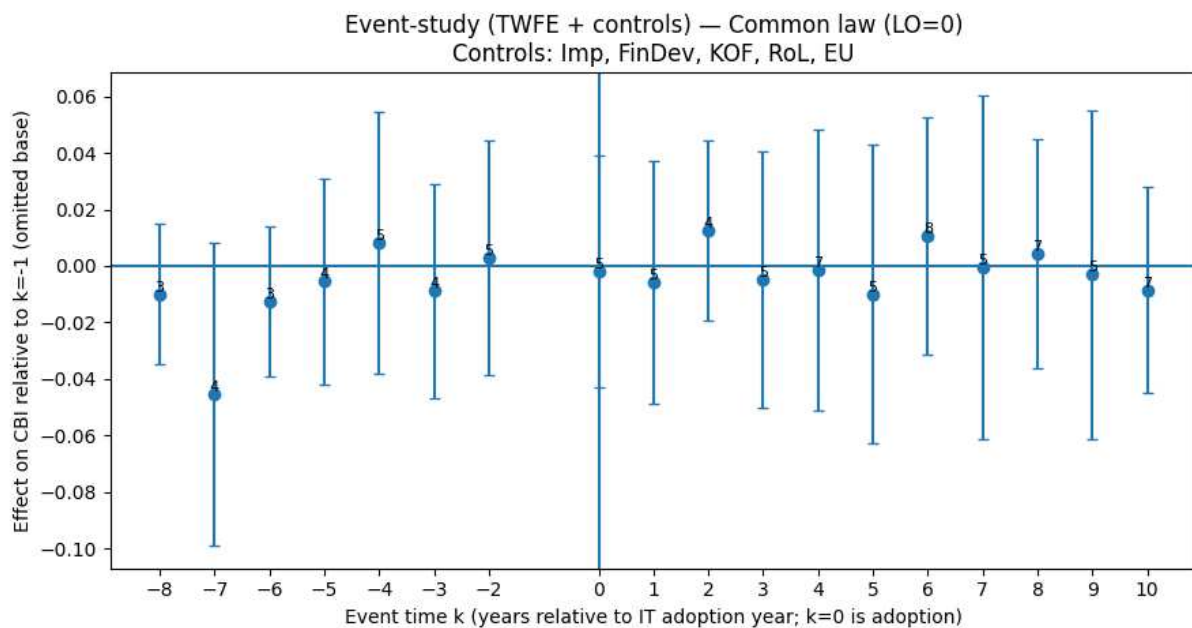


Figure 5. Event-study (TWFE + controls) – Common law

Figure 3 clearly indicate significant differences in the response of the dependent variable to treatment (the introduction of inflation targeting) between Common law and Civil law countries (Figure 2). In the case of Common law countries, estimates before IT introduction are mostly in negative territory, and after that, they do not show a clear trend, fluctuating

between positive and negative signs. There are also significantly lower positive values in the Common law subgroup (Figure 3) compared to the positive values of the Civil law group.

Figures 4 and 5 show event-study estimates for the augmented specification with controls. In gen-

eral, the inclusion of controls reduces the amplitude of estimates and (in some periods) widens confidence intervals, which is expected given the change in the effective sample and additional regression competition between the *IT* indicator and macro-institutional covariates. At the same time, the main qualitative conclusion regarding differences between legal traditions does not contradict the basic regressions: in the Civil law subsample, post-effects remain positive, while in Common law they are closer to zero/negative and less accurately estimated. The control variables do not substantially modify the patterns of relationships presented in Figures 2-3.

The results of the t-test and econometric analysis are interpreted in the following way. The launch of the new monetary regime may be surrounded by informal agreements between key policy actors about the way the central bank implements the monetary policy and how the political-economy interrelations surrounding monetary policy are changing. Assuming the Common law tradition as a less formal and more agreement-confirming one, these may explain why in such countries there are no statistically significant changes in central bank legislation, neither before *IT* launch, nor after. The informal political agreements about the new role of the central bank and the new monetary regime are kept. On the opposite, in Civil law countries, changes in legislation became even more prominent over time, reflecting greater power of the written law or law on paper.

The results support the conclusion that there is heterogeneity in the relationship between inflation targeting and central bank independence based on the Legal Origin criterion. At the same time, the results of the t-test, the basic econometric model with an interaction term, and the event-study of difference-in-difference frame complement each other and are not contradictory.

## 5. DISCUSSION

The results of the paper improve our understanding of why statistical estimates of *IT* preconditions and actual state may differ from theoretical assumptions, as shown in Mishkin and Schmidt-Hebbel (2002), IMF (2005), and Battini and

Laxton (2007). The factor of country heterogeneity based on the criterion of the Legal Origins plays an obvious role (Koziuk, 2025), and this finding plays a role in the case of *IT* launch that confirmed in the paper. The results are also consistent with studies that focus on the integration and globalization drivers of strengthening central bank independence (Dincer & Eichengreen, 2014; Bodea & Hicks, 2015; Romelli, 2022, 2024) in terms of relations between independent and control variables.

At the same time, the question of why legal tradition has such a striking impact on the institutional path of central banks across countries remains open for further research. Koziuk (2025) emphasized that the Common law may be better suited to maintaining an implicit agreement among key political actors on the key principle on which monetary policy should be based. The dominance of substance over form is also an important aspect of the debate on the formal and actual independence of central banks. Such debates (Cukierman et al., 1992; Hayo & Hefeker, 2002) are still far from consensus. And if the Common law tradition is better aligned with the dominance of substance over form, as shown in several works (La Porta et al., 1999, 2004, 2008; Pistor, 2006; Garoupa, 2022), the deviation of empirical results from the theoretical assumption about the preconditions for the introduction of inflation targeting can be explained by the results obtained in this study.

Inflation targeting, with its functional elements, is a monetary regime that requires substance to dominate over form in terms of interpreting the central bank mandate, the inflation performance, the nature of shocks, the causes of deviations from the target, etc. (Bernanke & Mishkin, 1997). If the Common law tradition better reflects the idea of substance over form, then this explains, using the example of the transition to inflation targeting, why there has been no significant formal CBI strengthening in this group of countries. A de facto change in the monetary regime as a result of implicit political agreement, supported by the relevant legal tradition, is sufficient.

In contrast, in Civil law countries, the transition to inflation targeting is accompanied by a more pronounced strengthening of central bank independence precisely because of the specific nature

of the written law in relationships between political actors, according to which the formal dimension of “protecting” the implementation of the relevant monetary regime may be more critical than in Common law countries. This approach echoes Berggren et al. (2014) regarding the correspondence between a country’s institutional characteristics and the likelihood of no central bank reforms or significant changes in legislation in

line with public preferences. In other words, consolidating public preference for price stability by strengthening the independence of an inflation-targeting central bank may be sensitive to legal tradition.

At the same time, the channels for transmitting the Legal Origins of the choice of central banks’ status require further study.

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## CONCLUSION

This study investigated the institutional dynamics between inflation targeting and central bank independence, specifically examining how legal traditions dictate the path of monetary institutions’ status reforms. By challenging the conventional approach to institutional preconditions for successful IT implementation, the analysis provides a more nuanced understanding of how monetary regimes and legal frameworks interact.

Empirical results of t-tests, panel regression, and event-study of a difference-in-difference are consistent with each other and allow us to outline that in Civil law countries the level of CBI is statistically significantly higher than in Common law countries. Statistically significant difference between the level of central bank independence before and after IT launch occurs only in Civil law countries. Further strengthening of CBI in line with IT implementation experience is clearly evident in Civil law countries. The interaction between the proxy for the IT launch and belonging to each legal tradition statistically significantly explains the difference in the strengthening of central bank independence between the two groups of countries. An event-study confirms that in the Civil law group, the strengthening of CBI occurs before the introduction of inflation targeting, and this strengthening is more resistant to statistical estimates than in Common law countries.

The results explain why early studies found a weak link between the theoretical preconditions for the introduction of inflation targeting and the actual situation, and deepen our understanding of heterogeneity in central bank status across countries. This study underscores that the success of inflation targeting is not strictly contingent upon a universal level of formal central bank independence. Rather, the institutional credibility of a central bank is a product of its ability to adapt within the constraints and traditions of its domestic legal system. Future research should further explore how these divergent paths of independence influence actual inflation outcomes and long-term macroeconomic stability.

## AUTHOR CONTRIBUTIONS

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Writing – original draft: Viktor Koziuk.

Writing – review & editing: Viktor Koziuk, Nataliia Dziubanovska.

## DECLARATION OF AI USE

During the preparation of this manuscript, the authors used ChatGPT only for reference editing, and Gemini was used for text reductions in some parts of the paper.

## DISCLOSURE STATEMENT

The authors reported no potential conflict of interest.

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## APPENDIX A

**Table A1.** IT countries grouped by legal system (Common Law vs Civil Law)

IT countries with Common Law	IT countries with Civil Law
UK, Canada, Australia, New Zealand, Jamaica, India, Ghana, Uganda, South Africa, Thailand, Israel (no CBI data)	Spain (before Euro launch), Albania, Romania, Hungary, Ukraine, Moldova, Turkey, Russia, Armenia (no CBI data), Kazakhstan, Indonesia, Mexico, Guatemala, Costa Rica, Columbia, Peru, Brazil, Chile, Uruguay, Paraguay, Dominican Republic, Philippines, Poland, Czech Republic, Georgia, S. Korea, Slovak Republic (before Eurozone joining), Norway, Sweden, Finland (before Euro launch), Iceland

*Note:* Countries without CBI data, as well as countries with hesitation about the relevance of IT (US (Common Law), Japan, and Switzerland (Civil Law)), are not in the analyzed group.