Economics and Business Letters
15(3), 179-191, 2026

Reconsidering the effectiveness of expansionary policies in developed economies: stimulating a renewed debate

Daniel Rodríguez-Asensio • Ana M. López-García*

1L.R.Klein University Institute-Autonomous University of Madrid, Faculty of Economics and Business Studies, Spain

Received: 24 July 2025
Revised: 24 January 2026
Accepted: 26 March 2026

Abstract
This article assesses the effectiveness of expansionary fiscal and monetary policies in advanced economies. This is due to evidence of declining fiscal multipliers and reduced monetary traction since the global financial crisis and the pandemic. Utilising a comprehensive body of research, this study posits that diminishing marginal returns emerge in circumstances where public sectors expand significantly, monetary policy maintains a persistently accommodative stance, and institutional constraints limit productivity gains. A review of the extant literature on fiscal multipliers, with particular reference to cross-country and US evidence, is presented. The reasons for the variation in estimates across studies are explained, and the long-run implications of unconventional monetary policies are discussed. The findings of this study indicate that, while expansionary policies continue to be advantageous for short-term stabilisation, particularly during periods of significant economic decline, their structural efficacy has diminished. This necessitates enhancements in the efficiency of public expenditure, enhanced fiscal-monetary coordination across temporal horizons, and policy designs that promote innovation and private-sector-led growth.

Keywords: fiscal policy, monetary policy, developed countries, expansionary policies, public policies
JEL Classification Codes: E52, E62, E63, A11

1. Introduction

Since the emergence of Keynesian theory, the intervention of the public sector in the economy

* Corresponding author. E-mail: ana.lopez@uam.es.

Citation: Rodríguez-Asensio, D. and López-García, A. M. (2026). Reconsidering the effectiveness of expansionary policies in developed economies: stimulating a renewed debate, *Economics and Business Letters*, 15(3), 179-191. DOI: 10.17811/ebl.15.3.2026.179-191.

has steadily increased, especially during financial and economic crises (Stockhammer, 2022; Vergés-Jaime, 2023). This tendency can be observed both in the size of the public sector in developed countries and in the expansion of the balance sheets of the main central banks across the world. The academic debate regarding the effectiveness of fiscal and monetary policy has been a constant (Arestis and Sawyer, 2004; Martin et al., 2022). While size of governments and central banks increase in advanced economies, growth rates, potential growth and productivity, among others, are decreasing or, at least stagnating (Afonso and Furceri, 2010; Gupta, 2023).

The main purpose of this article is to provide an up-to-date review of the effects of fiscal and monetary policies in advanced economies, synthesising the most relevant contributions. Our central hypothesis is that diminishing marginal returns to fiscal and monetary tools arise under specific conditions, notably the state of the business cycle, the degree of monetary accommodation, the composition and financing of spending, and institutional quality, and that many advanced economies currently meet these conditions. In such contexts, further increases in public spending or large-scale monetary expansion generate smaller gains in output and may have negative effects on employment, innovation, growth and productivity.

To address this question, Section 2 examines the effectiveness of expansionary fiscal policies, contrasting increases in public spending with tax cuts. Section 3 discusses the effects of conventional and unconventional monetary policy. Finally, section 4 presents the conclusions of the study.

2. Effectiveness of fiscal policy: methodology and empirical evidence

2.1. Fiscal multipliers: a review

Expansionary policies based on increased public spending have traditionally been used by governments to boost economic activity after recessions. They have also been employed as instruments for income redistribution (Dhital et al., 2023; Ferriere and Navarro, 2025). Two broad approaches dominate policy debates. One side supports the implementation of quantitative easing and increased public spending, while the other advocates for austerity measures and a focus on fiscal consolidation and disciplined public finances (Skidelsky and Fraccaroli, 2017; Alesina et al., 2019). A fiscal measure is deemed effective if the multiplier associated with the fiscal expansion is positive and sufficiently large (Afonso, 2008). It is similarly important to consider the lack of evidence indicating that discretionary fiscal policy has played a significant stabilizing role over the past decades (Auerbach, 2002; Caprioli et al., 2020). Accordingly, we focus on these two areas: fiscal multiplier size and the distributional implications of public spending.

According to IMF (Nicoletta et al., 2014), fiscal multipliers "are usually defined as the ratio of a change in output to an exogenous change in the fiscal deficit with respect to their respective baselines". Fiscal multipliers are a means of measuring the effectiveness of fiscal policy in stimulating economic activity (Brinca et al., 2016; Andrés, 2024). The impact of a fiscal shock on output is dependent on the specific characteristics of the country in question, the state of the

economy, and the type of fiscal instrument under consideration. Around the debate on the macroeconomic impact of fiscal stimuli, the available empirical evidence suggests that government consumption and tax cuts have an overall positive impact on output (Barnichon et al., 2022). Nevertheless, there is still no consensus on the size of the multipliers for fiscal policy (Ilzetzki et al., 2013; Collingro and Frenkel, 2022).

The transmission mechanisms of fiscal policy remain an open empirical question and continue to be the subject of ongoing debate. In the 1990s, the investigation was in favour of boosting economies using fiscal plans based on increasing public spending (Mineshima et al., 2014). A key question for the 2000s decade, and specially before pandemic, has been whether diminishing returns phenomenon have reduced the effectiveness of public spending. Research indicates that multipliers tend to be higher during recessions and lower during expansions. This pattern suggests the presence of diminishing returns under certain economic conditions. Furthermore, analysis of US fiscal multipliers reveals significant variability, ranging from close to 0 in normal times to 2.5 during recessions (Auerbach and Gorodnichenko, 2012). Ramey and Zubairy (2018) indicate a more negative impact of fiscal measures based on an increase in public spending: "All estimates indicate multipliers below unity". Ouliaris and Rochon (2021) conclude that "expenditure and tax multipliers have fallen post-crisis in the US, implying that the effectiveness of fiscal policy has declined.". A significant number of relevant references agree on an estimate of the multipliers of expenditure with results below unity, thus inferring some displacement effects of the fiscal stimulus (Raga, 2022). As illustrated in Table 1, the data is sufficiently explanatory in relation to total public expenditure.

Table 1. Size of Fiscal multiplier from selected developed cross-country studies

Sample coverage	Short term fiscal multiplier	Source
OECD countries	0.14 to 0.35	Auerbach & Gorodnichenko (2013)
OECD countries	0.7	Corsetti et al. (2012)
OECD countries	0.9	Barnichon et al. (2022)
OECD countries	0.9	OECD (2009)
129 countries	0.75 to 0.84	Sheremirov & Spirovska (2019)
102 countries	0.4	Kraay (2014)
44 countries	0.4	Ilzetzki et al. (2013)
21 countries	0.0 to 0.4	Spilimbergo et al. (2009)
G7 countries	0.79	Baum et al. (2012)
G7 countries	0.79	Mineshima et al. (2014)
USA	0.1 to 0.2	Afonso et al. (2011)
USA	0.5 to 0.8	Blanchard & Perotti (2002)
USA	0.8 to 0.9	Burriel et al. (2009)
USA	<1.0	Ramey & Zubairy (2018)
USA	<1.0	Ouliaris & Rochon (2021)

Notes: The data presented is intended as a general guideline. The estimates in Table 1 cannot be compared directly across studies because samples, identification strategies, time horizons and instruments used differ. They should therefore be read as indicative ranges rather than as precise benchmarks. Source: Own elaboration based on Mineshima et al. (2014), Raga (2022) and cited references.

Why do fiscal multiplier estimates differ across studies? Despite the fact that the reviewed empirical literature presents a range of estimates of fiscal multipliers, these differences can be largely attributed to variations in methodology, data frequency, identification strategies and institutional settings.

Firstly, studies that use SVAR models with narrative identification (Auerbach and Gorodnichenko, 2013; Ramey and Zubairy, 2018) tend to obtain lower multipliers than panel estimations based on cross-country averages (Corsetti et al., 2012; Barnichon et al., 2022). Narrative approaches are more precise in isolating exogenous fiscal shocks, but this does have the effect of reducing the estimated effects.

Secondly, the state of the economy plays a crucial role: multipliers are systematically larger in recessions than in expansions, which explains why works focusing on crisis episodes (Auerbach and Gorodnichenko, 2013) report higher values, while studies using long-run averages for OECD countries often find values below unity.

Thirdly, institutional characteristics, such as government efficiency, the composition of spending, market rigidities and monetary policy stance, also generate systematic differences. Research indicates that countries with high initial public debt, rigid labour markets or accommodative monetary policy typically exhibit lower multipliers (Ilzetzki et al., 2013; Ouliaris and Rochon, 2021).

Therefore, the findings do not reflect contradictory evidence, but rather the presence of different mechanisms and contexts that shape the effectiveness of fiscal policy. This helps to explain why, according to our hypothesis, most advanced economies, characterised by large public sectors, high debt ratios and expansionary monetary environments, are likely to display diminishing marginal returns from additional public spending.

2.2. Diminishing returns in advanced economies

Since the global financial crisis of 2008, a central question has been whether fiscal multipliers are lower than in earlier periods. Bandrés and Gadea (2019, 2023) demonstrate that there is a negative linear relationship between public spending and economic growth in OECD countries. Blanchard and Leigh (2013, 2014) argue that the fiscal austerity measures taken by the European Union (EU) had a worse impact than expected. This had a negative effect on the economic, financial and employment situation across the continent. Cronin and McQuinn (2021) conclude that "forecasters now overestimate the effect of fiscal policy on output growth."

The evidence presented supports the claim that the size of the public sector in most developed OECD countries, particularly within the EU, acts as a significant impediment to economic growth, even prior to the advent of the pandemic. Pevcin (2004) illustrates that the public spending ratio of eight European countries should have been 19 p.p. lower. Also, Chobanov and Mladenova (2009) consider that the optimum government size should be 25% of Gross Domestic Product GDP for maximizing economic growth in 29 OECD countries. Afonso and Schuknecht (2019) stress the importance of ensuring that public spending does not exceed 35% of GDP and posit that there is a robust negative correlation between the magnitude

of government intervention and economic performance. They further identify effective spending levels, contingent on the nature of expenditure (Table 2).

Table 2. Efficient spending levels by type of expenditure (% of GDP).

Spending Type	Efficient Spending Levels (% of GDP)
Public Consumption	12-16%
Education	3.5-5%
Health	6-7%
Infrastructure	2-3%
Social Spending	up to 20%
Total Spending	30-35% or at most 40%

Notes: adapted from Afonso and Schuknecht (2019).

In terms of government size thresholds, while several studies suggest ranges or thresholds for public spending, we do not interpret them as universal optima. Questions of causality, nonlinearities, and country-specific institutional and demographic factors remain contested; hence, Table 2 is offered as illustrative rather than prescriptive.

It is necessary to consider the consequences of expansionary fiscal policies based on public spending via public debt. There are two ways of financing a fiscal program based on public spending: 1) Tax increase and 2) Turning to public debt. While taxes serve as a crucial source of revenue for government operations, an excessively high tax burden may reduce economic growth and productivity by affecting investment, innovation, consumer spending, and overall efficiency (Holcombe and Lacombe, 2014; Lee and Gordon, 2015; Alinaghi and Reed, 2021). From the perspective of supply-side economics, the implementation of tax reductions is considered a significant catalyst for enhancing economic productivity. By reducing tax rates, individuals and businesses retain more of their income, creating incentives to increase investment, production and innovation (Johansson et al., 2008; Auerbach and Smetters, 2017; Barro and Wheaton, 2020). The underlying mechanism operates through investment, innovation and risk-taking (Slemrod, 2003; McBride, 2012).

In this context, the concept of diminishing returns is central to the Laffer curve and has a significant impact on economic discourse and policymaking. Laffer's theory (1981) suggests that there exists an optimal tax rate beyond which increasing rates could lead to diminishing returns. At low tax rates, the government collects minimal revenue, while at extremely high rates, the tax burden becomes a disincentive for economic activities, resulting in lower revenue. The optimal tax rate, therefore, lies in the middle, where tax revenue is maximized without stifling economic activities (Laffer, 2004; Domitrovic, 2021). A nuanced understanding of the Laffer curve remains crucial for crafting effective fiscal policies that optimize government revenue while fostering a conducive environment for sustained economic growth (Miravete et al., 2018; Bhimjee and Leão, 2020; Head et al., 2024).

Developed economies not only have attended public spending and fiscal programs based on

huge amount of public investment but they have also financed them with public debt. The implementation of fiscal programmes has resulted in a significant increase in government debt, predominantly financed through the issuance of low-interest debt by central banks, both through conventional and unconventional expansionary programs (Beckmann et al., 2022).

Although the level of public spending is undoubtedly a key factor in determining the fiscal multiplier, other factors include the composition of spending and the quality of institutions (Afonso and Jalles, 2016; Pevcin, 2020; Martinangeli et al., 2024). It is rare to find a developed country showing structural pattern of growth without strong and reliable institutions (Acemoglu and Robinson, 2012; Lloyd et al., 2018; Engerman and Sokoloff, 2025).

Regarding to the empirical validation, a number of recent estimates support the hypothesis of diminishing marginal returns of expansionary policies in advanced economies. For instance, Ramey and Zubairy (2018) report government spending multipliers consistently below unity even during slack periods, while Ouliaris and Rochon (2021) find that both expenditure and tax multipliers in the United States have declined significantly in the post-crisis period.

Cross-country evidence also supports this. As Bandrés and Gadea (2023) document, there is a negative linear relationship between public spending and growth in OECD countries, which reinforces the idea that large governments face diminishing returns from additional fiscal expansion. Barnichon et al. (2022) demonstrate that the nature and context of economic shocks have a significant impact on the magnitude of multipliers, which frequently remain below one in advanced economies.

Taken together, these findings are consistent with our central argument that most developed economies operate on the downward-sloping segment of the marginal returns curve, where additional spending yields smaller, or even negligible, effects on output and productivity.

3. Monetary policy: conventional and unconventional evidence

3.1. Conventional monetary policy

Conventional monetary policy refers to the use of policy interest rates and open market operations by central banks to achieve macroeconomic objectives such as price stability, full employment, and economic growth. It is important to recognise the potential limitations of this approach, that may compromise the overall effectiveness of monetary policy and exacerbate economic challenges (Bernanke, 2020; Bindseil and Fotia, 2021).

One of the primary adverse effects associated with conventional monetary policy is its impact on income inequality. When central banks lower interest rates to stimulate economic activity, the benefits are not evenly distributed across society. Moreover, the wealth effect generated by asset price appreciation can contribute to a widening wealth gap (Ampudia et al., 2018; Lenza and Slacalek, 2018; Adkins et al., 2021).

When interest rates are kept low for an extended period, investors may search for higher returns. This behaviour can lead to excessive risk-taking and drive asset prices, such as stocks and real estate, beyond their fundamental values. In the ECB's monetary policy toolkit, negative

interest rate policy has become a well-established instrument. It is reasonable to posit that the potential for adverse economic consequences increases with the degree of expansionary monetary policy and the duration of its implementation. Policymakers must carefully navigate the delicate balance between stimulating economic activity and preventing the formation of unsustainable asset bubbles to mitigate the adverse effects on financial stability (Aoki and Nikolov, 2015; Guerron-Quintana et al., 2023). The effectiveness of conventional monetary policy is contingent on the transmission mechanisms working smoothly. In some cases, factors such as a dysfunctional banking system or heightened uncertainty can impede the transmission of monetary policy actions to the real economy, limiting their impact (Johnson et al., 2020).

3.2. Unconventional monetary policy

Unconventional monetary policies, including quantitative easing (QE), were designed to be implemented during periods of economic downturns to provide a stimulus when traditional monetary tools, such as lowering interest rates, become ineffective. In recent years, there has been a degree of debate surrounding the issue of economic dependence on unconventional monetary policy (Bartsch et al., 2019; Papadamou et al., 2020; Grasselli, 2022). QE involves central banks purchasing long-term financial assets to inject liquidity into the financial system. This policy aims to lower interest rates, increase money supply, and encourage spending and investment.

While these policies were initially considered necessary to address immediate challenges, their prolonged use has raised significant concerns. These concerns relate to adverse effects on financial markets, the real economy, and society at large (Borio and Zabai, 2018; Rossi, 2021; Bernanke, 2022; Bhattarai and Neely, 2022). The flood of liquidity into financial markets can lead to excessive valuations in equities, real estate, and other assets, creating asset bubbles and exacerbating wealth inequality. For instance, during the Eurozone crisis of the late 2000s and early 2010s, the ECB lowered interest rates and implemented unconventional monetary policy measures to address the sovereign debt crisis and stimulate economic recovery. The uneven distribution of economic benefits across member states and concerns about financial stability raised questions about the long-term sustainability of these policies (Mongelli et al., 2018; Karremans, 2021).

So, prolonged periods of unconventional policies may create a moral hazard as market participants become accustomed to central banks intervening to mitigate risks (Pernell and Jung, 2024). Schairer (2024) conceptualizes unconventional monetary policy as a novel destabilizing mechanism and analyses the contradictory implications for overall macro-financial stability, with a particular focus on aggregate demand. The extended use of unconventional policies may limit central banks' ability to respond effectively to future economic downturns.

Nevertheless, the distributional and asset-price effects highlighted above should be interpreted as trade-offs relative to the crisis-stabilisation benefits of expansionary policy, not as blanket evidence of ineffectiveness. In periods of acute economic downturn, financial strategies can help to prevent significant losses in output and financial instability. However,

concerns have been raised that prolonged measures to stimulate the economy may lead to increased present-value costs, including inequality, risk-taking behaviour and misallocation of resources, as the economy returns to normal. We therefore distinguish short-run stabilisation from long-run efficiency considerations when assessing monetary effectiveness.

4. Conclusions

The expansion of the public sector and the increasing reliance on active macroeconomic policies have been defining features of developed economies over recent decades. This article has revisited the effectiveness of expansionary fiscal and monetary policies in that context, drawing on a broad body of empirical and theoretical evidence. The findings point to a key distinction that is often blurred in policy debates: the difference between short-run countercyclical effectiveness and long-run structural consequences.

From a short-run, countercyclical perspective, expansionary fiscal and monetary policies can still play a stabilizing role, particularly during deep recessions or periods of acute financial stress. The literature shows that fiscal multipliers tend to be higher in downturns, and unconventional monetary policies may help prevent systemic collapse when conventional tools are constrained. In this sense, temporary and well-targeted interventions remain justified as instruments for smoothing business cycle fluctuations and mitigating extreme macroeconomic shocks.

However, the evidence reviewed in this article suggests that long-run structural effects follow a different logic. As public spending and central bank balance sheets expand persistently, both fiscal and monetary multipliers tend to decline and may even become negative. In many advanced economies, public sectors appear to operate beyond levels consistent with maximizing growth, productivity, and innovation. Similarly, the prolonged use of unconventional monetary policies raises concerns about asset price distortions, income and wealth inequality, moral hazard, and reduced policy space for future downturns. These patterns are consistent with a framework of conditional diminishing returns, in which the effectiveness of expansionary policies depends critically on initial conditions, institutional quality, and the existing size of government and monetary intervention.

An important implication of this analysis is the need to reconsider fiscal–monetary coordination across different time horizons. While coordination may enhance short-run stabilization during crises, sustained reliance on joint expansionary strategies risks reinforcing structural inefficiencies over the long term. A clear separation between temporary countercyclical actions and permanent policy stances is therefore essential. Without such a distinction, short-run stabilization tools may inadvertently undermine long-run growth potential and macro-financial stability.

Relative to existing policy surveys, which often analyze fiscal and monetary policies separately, the contribution of this paper lies in synthesizing evidence from both domains within a unified perspective. By jointly assessing fiscal and monetary expansion through the lens of diminishing marginal returns, the article highlights common mechanisms and shared

constraints that shape policy effectiveness in advanced economies. This integrated approach helps explain why increasingly aggressive policy interventions have delivered progressively weaker outcomes over time.

In light of these findings, policymakers are encouraged to adopt a more balanced and forward-looking strategy. Beyond short-run stabilization, priority should be given to improving the efficiency of public spending, optimizing government size, strengthening institutional quality, and designing tax systems that support innovation and private-sector-led growth. A recalibrated policy mix, grounded in a clear distinction between cyclical management and structural objectives, may offer a more sustainable path toward resilient and inclusive economic growth.

Acknowledgments. The authors would like to thank two anonymous reviewers for their helpful comments and suggestions on an earlier version of the analysis.

References

Acemoglu, D. and Robinson, J.A. (2012) *Why nations fail: the origins of power, prosperity and poverty*, Crown Publishers.

Adkins, L., Cooper, M. and Konings, M. (2021) Class in the 21st century: asset inflation and the new logic of inequality, *Environment and Planning A: Economy and Space*, 533, 548-572.

Afonso, A. (2008) Expansionary fiscal consolidations in Europe: new evidence, *Applied Economics Letters*, 17(2), 105–109.

Afonso, A. and Furceri, D. (2010) Government size, composition, volatility and economic growth, *European Journal of Political Economy*, 26(4), 517-532.

Afonso, A., Baxa, J. and Slavik, M. (2011) *Fiscal developments and financial stress: a threshold VAR analysis*, Working paper 1319, ECB, Frankfurt.

Afonso, A. and Jalles, J.T. (2016) Economic performance, government size, and institutional Quality, *Empirica*, 43, 83–109.

Afonso, A. and Schuknecht, L. (2019) How "big" should government be?, *Economics and Business Letters*, 8(2), 85-96.

Alesina, A., Giavazzi, F. and Favero, C. (2019) *When it works and when it doesn't*, New Jersey, *Princeton University Press*.

Alinaghi, N. and Reed, W.R. (2021) Taxes and economic growth in OECD countries: a meta-analysis, *Public Finance Review*, 49(1), 3-40.

Ampudia, M., Georgarakos, D., Slacalek, J., Tristani, O., Vermeulen, P. and Violante, G.L. (2018) *Monetary policy and household inequality*, ECB Working Paper Series No 2170.

Andrés, J. (2024) *The effectiveness of fiscal policy*, in Fiscal Policy in a Turbulent Era, 86-102, *Edward Elgar Publishing*.

Aoki, K. and Nikolov, K. (2015) Bubbles, banks and financial stability, *Journal of Monetary Economics*, 74, 33-51.
Arestis, P. and Sawyer, M. (2004) On the effectiveness of monetary policy and of fiscal policy, *Review of Social Economy*, 62(4), 441-463.
Auerbach, A.J. (2002) *Is there a role for discretionary fiscal policy?* NBER Working paper series, 9306, NBER, Cambridge.
Auerbach, A.J. and Gorodnichenko, Y. (2012) Measuring the output responses to fiscal policy, *American Economic Journal*, 4(2), 1–27.
Auerbach, A.J. and Gorodnichenko, Y. (2013) *Fiscal multipliers in recession and expansion*, in A. Alesina and F. Giavazzi (eds) Fiscal policy after the financial crisis, University of Chicago Press.
Auerbach, A.J. and Smetters, K. (eds) (2017) *The economics of tax policy*, Oxford University Press, New York.
Bandrés, E. and Gadea, M.D. (2019) Investigating causal relations between public spending and economic growth in Europe, *Revista de Economía Mundial*, 51, 51-78
Bandrés, E. and Gadea, M.D. (2023) Estimating the relationships between public expenditure and economic growth in advanced countries, *Cuadernos Económicos de ICE*, 105.
Barnichon, R., Debortoli, D. and Matthes, C. (2022) Understanding the size of the government spending multiplier: it's in the sign, *The Review of Economic Studies*, 89(1), 87-117.
Barro, R.J. and Wheaton, B. (2020) Taxes, incorporation, and productivity, *Tax Policy and the Economy*, 34, 91-111.
Bartsch, E., Boivin, J., Fischer, S., Hildebrand, P. and Wang, S. (2019) Dealing with the next downturn: from unconventional monetary policy to unprecedented policy coordination, *Macro and Market Perspectives*, 105, 1-16.
Baum, A., Poplawski-Ribeiro, M. and Weber, A. (2012) *Fiscal multipliers and the state of the economy*, IMF Working Paper 12/286 Washington DC*: IMF*.
Beckmann, J., Gern, KJ. and Jannsen, N. (2022) Should they stay or should they go? Negative interest rate policies under review, *International Economics and Economic Policy*, 19, 885–912.
Bernanke, B.S. (2020) The new tools of monetary policy, *American Economic Review*, 1104, 943-983.
Bernanke, B.S. (2022) *21st century monetary policy: the Federal Reserve from the great inflation to Covid19*, Norton & Company Inc.
Bhattarai, S. and Neely, C.J. (2022) An analysis of the literature on international unconventional monetary policy, *Journal of Economic Literature*, 60(2), 527-597.
Bhimjee, D. and Leão, E. (2020) Public debt, GDP and the sovereign debt Laffer curve: a country-specific analysis for the Euro Area, *Journal of International Studies*, 13(3), 280-295.
Bindseil, U. and Fotia, A. (2021) *Conventional monetary policy*, in Introduction to Central Banking, 29-51, SpringerBriefs in Quantitative Finance, Cham.
Blanchard, O. and Leigh, D. (2013) Growth forecast errors and fiscal multipliers, *The American Economic Review*, 103(3), 117–120.

Blanchard, O. and Leigh, D. (2014) Learning about fiscal multipliers from growth forecast errors, *IMF Economic Review*, 62(2), 179–212.
Blanchard, O. and Perotti, R. (2002) An empirical characterization of the dynamic effects of changes in government spending and taxes on output, *Quarterly Journal of Economics,* 117, 1329–1368.
Burriel, P., de Castro, F., Garrote, D. Gordo, E., Paredes, J. and Pérez, J.J. (2009) *Fiscal policy shocks in the euro area and the U.S.*, Working paper 1133, ECB, Frankfurt.
Borio, C.E.V. and Zabai, A. (2018) *Unconventional monetary policies: a re-appraisal*, in Research handbook on central banking, Conti-Brown, P. and Lastra, R.M. (eds.), 398-444, *Edward Elgar Publishing*.
Brinca, P., Holter, H.A., Krusell, P. and Malafry, L. (2016) Fiscal multipliers in the 21st century, *Journal of Monetary Economics*, 77, 53-69.
Caprioli, F., Tommasino, P. and Romanelli, M. (2020) Discretionary fiscal policy in the Euro area: past, present and future, *Economia Publica*, 47(1) 55-85.
Chobanov, D. and Mladenova, A. (2009) *What is the optimum size of government*, Institute for Market Economics.
Collingro, F. and Frenkel, M. (2022) Fiscal multipliers in the euro area: a comparative study, *The Quarterly Review of Economics and Finance*, 84, 386-397.
Corsetti, G., Meier, A. and Müller, G. (2012) *What determines government spending multipliers?* Working paper WP/12/150, IMF.
Cronin, D. and McQuinn, K. (2021) Fiscal policy and growth forecasts in the EU: are official forecasters still misestimating fiscal multipliers? *Review of World Economics*, 157, 453-462.
Dhital, S., Jiang, S. and Reese, J. (2023) Effects of monetary and government spending policy on economic inequality, *Journal of Macroeconomics*, 77, 103547.
Domitrovic, B. (2021) *The emergence of Arthur Laffer: the foundations of supply-side economics in Chicago and Washington, 1966–1976*, Palgrave McMillan.
Engerman, S.L. and Sokoloff, K.L. (2025) *Institutional and non-institutional explanations of economic differences*, Handbook of New Institutional Economics, 757-784.
Ferriere, A. and Navarro, G. (2025) The heterogeneous effects of government spending: it's all about taxes, *Review of Economic Studies*, 92(2), 1061-1125.
Grasselli, M.R. (2022) Monetary policy responses to Covid-19: a comparison with the 2008 crisis and implications for the future of central banking, *Review of Political Economy*, 34(3), 420-445.
Guerron-Quintana, P.A., Hirano, T. and Jinnai, R. (2023). Bubbles, crashes, and economic growth: Theory and evidence, *American Economic Journal: Macroeconomics*, 152, 333-371.
Gupta, R. (2023) The role of central banks in shaping economic stability: lessons from the Global Financial Crisis, *Business and Economics Journal*, 14, 440.
Head, K., Mayer, T. and Melitz, M. (2024) The Laffer curve for rules of origin, *Journal of International Economics*, 150, 103911.
Holcombe, R.G. and Lacombe D.J. (2014) The effect of state income taxation on per capita income growth, *Public Finance Review*, 32(3), 292-312.

Ilzetzki, E., Mendoza, E.G. and Végh, C.A. (2013) How big (small?) are fiscal multipliers?, *Journal of Monetary Economics*, 60(2), 239-254.
Johansson, Å, Heady, C., Arnold, J.M., Brys, B. and Vartia, L. (2008) *Taxation and economic growth*, OECD Economics Department Working Papers, No. 620.
Johnson, G., Kozicki, S., Priftis, R., Suchanek, L., Witmer, J. and Yang, J. (2020) *Implementation and effectiveness of extended monetary policy tools: lessons from the literature*, Bank of Canada Staff Discussion Paper No. 2020-16.
Karremans, J. (2021) This time wasn't different: responsiveness and responsibility in the eurozone between 2007 and 2019, *Journal of Common Market Studies*, 59(6), 1536-1554.
Kraay, A. (2014) Government spending multipliers in developing countries: evidence from lending by official creditors, *American Economic Journal*, 6(4), 170–208.
Laffer, A.B. (1981) Supply-side economics, *Financial Analysts Journal*, 37(5), 29-43.
Laffer, A.B. (2004) *The Laffer curve: past, present and future*, Executive summary Backgrounder, No. 1765, The Heritage Foundation.
Lee, Y. and Gordon, R.H. (2015) Tax structure and economic growth, *Journal of Public Economics*, 89(5-6), 1027-1043.
Lenza, M. and Slacalek, J. (2018) *How does monetary policy affect income and wealth inequality? Evidence from quantitative easing in the euro area*, ECB Working Paper Series, No 2190.
Lloyd, P. and Lee, C. (2018) A review of the recent literature on the institutional economics analysis of the long-run performance of nations, *Journal of Economic Surveys*, 32(1), 1–22.
Martin, T., Ondra, V. and Dominik, K. (2022) The role of fiscal vs monetary policy in modern economics, *Fusion of Multidisciplinary Research, An International Journal*, 3(2), 329-341.
Martinangeli, A.F., Povitkina, M., Jagers, S. and Rothstein, B. (2024) Institutional quality causes generalized trust: experimental evidence on trusting under the shadow of doubt, *American Journal of Political Science*, 68(3), 972-987.
McBride, W. (2012) *What is the evidence on taxes and growth?* Tax Foundation, Special Report, No. 207, Washington, DC.
Mineshima, A., Poplawski-Ribeiro, M. and Weber, A. (2014). *Size of fiscal multipliers*, in C. Cottarelli, P. Gerson, and A. Senhadji (eds.): Post-Crisis Fiscal Policy, 315-372, Cambridge: MIT Press.
Miravete, E.J., Seim, K. and Thurk, J. (2018) Market power and the Laffer curve, *Econometrica*, 86(5), 1651-1687.
Mongelli, F.P., Dorrucci, E., Ioannou, D. and Terzi, A. (2018) Responses to the euro area crisis: measuring the path of European institutional integration, *Governance of the European Monetary Union*, 69-86.
Nicoletta, B., Eyraud, L., Forni, L. and Weber, A. (2014) *Fiscal multipliers: size, determinants and use in macroeconomic projection*, Technical Notes and Manuals IMF.
OECD (2009) *The effectiveness of and scope of fiscal stimulus*, Economic Outlook, march, OECD.
Ouliaris, S. and Rochon, C. (2021) Pre- and post-Global Financial Crisis policy multipliers, *Journal of Macroeconomics*, 70, 103370.

Papadamou, S., Siriopoulos, C. and Kyriazis, N.A. (2020) A survey of empirical findings on unconventional central bank policies, *Journal of Economic Studies*, 47(7), 1533-1577.
Pernell, K. and Jung, J. (2024) Rethinking moral hazard: government protection and bank risk-taking, *Socio-Economic Review*, 22(2), 625–653.
Pevcin, P. (2004) *Does optimal spending size of government exist?* European Group of Public Administration Conference, Slovenia.
Pevcin, P. (2020) Government size and quality of governance: does state size matter? *International Journal of Business and Economic Sciences Applied Research IJBESAR*, 13(3), 7-14.
Raga, S. (2022) *Fiscal multipliers: a review of fiscal stimulus options and impact on developing countries*, WP Supporting Economic Transformation.
Ramey, V.A. and Zubairy, S. (2018) Government spending multipliers in good times and in bad: evidence from US historical data, *The Journal of Political Economy*, 126(2), 850–901.
Rossi, B. (2021) Identifying and estimating the effects of unconventional monetary policy: how to do it and what have we learned? *The Econometrics Journal*, 24(1), C1–C32.
Schairer, S. (2024) The contradictions of unconventional monetary policy as a post-2008 thwarting mechanism: financial dominance, shadow banking, and inequality, *Review of Evolutionary Political Economy*, 5, 1–29.
Sheremirov, V. and Spirovska, S. (2019) *Fiscal multipliers in advanced and developing countries: evidence from military spending*, Working paper no. 19-3, Federal Reserve Bank of Boston.
Skidelsky, R. and Fraccaroli, N. (2017) *Austerity vs stimulus*, Palgrave Macmillan.
Slemrod, J. (2003) The truth about taxes and economic growth, *Challenge*, 46(1), 5-14.
Spilimbergo, A., Schindler, M. and Symansky, S.A. (2009) *Fiscal multipliers*, No. 2009-2011, Washington, DC: International Monetary Fund.
Stockhammer, E. (2022) Post-Keynesian macroeconomic foundations for comparative political economy, *Politics & Society*, 50(1), 156-187.
Vergés-Jaime, J. (2023) Fiscal austerity vs. expansionary fiscal policy: on the results of these opposed economic policies applied to fight recessions, *Journal of Economic Policy Reform*, 26(4), 421-441.