MINERVA RESEARCH INSTITUTE

REVIEW II

SEPTEMBER-DECEMBER 2023

"STANDING ON THE SHOULDERS OF GIANTS"

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WHAT TO EXPECT

As an active member, We require **commitment and dedication** to your team. We expect a **partiticpation** of at least 50% of all events and an average work load of **3h per week**. You can also count on meeting a commutnity of like-minded people and having fun with our bonding events.

FUTURE EVENTS

Next semester we will again present our **"Thesis Training Workshop Series"**

- Research Design and Qualtrics
- Analysis on Stata/R
- Academic Writing
- LaTex and AI Skills

Additonally, you can join us during our Paper **Presentation and Debate**. And if you are part of the committee, we'll see each others at our next game night.

MINERVA RESEARCH INSTITUTE

Initianlly, known as the Research Division, our committee, the Minerva Research Institute has become a space for curious and anbitious people to share and connect with fellow research enthousiasts. As our community grew, we have transitioned to a more dynamic and flexible approach, fostering collaboration among members We now mainly focus on producing policy briefs, literature reviews, and scientific research papers. As one of our members, you will find a commmunity to debate and exchange your views and opinions.

Minerva offers various pathways for personal and professional growth. Whether you're drawn to in-depth research, you have a critical eye for mistake or wish to showcase your connections and creativity our four Research, Supervising, Event and Marketing team are there for you. At Minerva, it's about nurturing your interests, connecting with similar-minded individuals, and having a fulfilling experience while developing skills in a supportive community.

Research M MINERVA Institute

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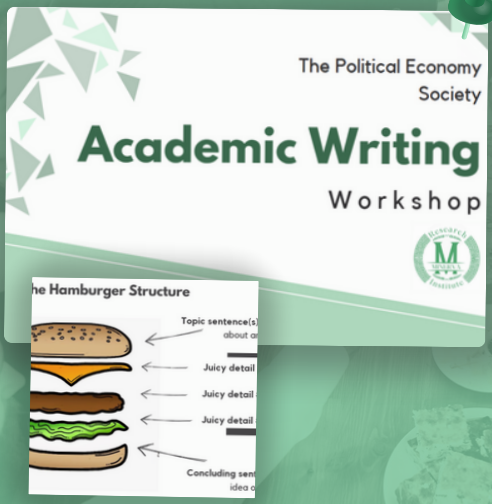
PAST EVENTS

Committee Time

Our Regular Committee Meetings happen every 2 weeks, as we trust our members to work independently and autonomously. The committee meetings are mainly there to check how everyone is doing and give updates on the projects.
Next to that, we also have Game Nights. We all meet at someone's place for a drink, some snack and a board game (Catan). Additionally, we sometimes have these nigthts online so everyone can join from afar, our last one was Among Us.



Workshops

We prioritize the development of robust research skills among our members through a series of recurring workshops, the "Thesis Traning Workshop Series". These workshops, meticulously organized by the Events Team, comprise four distinct modules that cater to diverse facets of academic research. As part of our community sharing goal, we have opened our workshop to any interested person.

Paper Presentations

The soul of our committee is the creation of academic papers, whether they take the form of policy brief, literature review, replication or experimental analysis. However, we also encourage our members to share their expertise and opinions through our Paper Presentations and the open discussion that follows. It is the occasion to connect with our community and enter an interesting and multiperspective Debate on the topic presented.

Minerva Team

Benedikt Hornung

Workshop Facilitator

Edmunds Krumins

Researcher

Jeanne Olla

Research Director
Researcher

Mareks Mateušs

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Tina Brienza

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Max Nuboer

Researcher

Patricia Ortuño Camacho

Communication Manager
Researcher

Paul Haimerl

Researcher

Sofie van de Zee

Head Representative

UPCOMING EVENTS

THESIS TRAINING WORKSHOP SERIES

Save the Date!

- **Research Design** (5-9th Feb)
- **Surveys and Qualtrics** (26-1st March)
- **R Beginner** (14th March)
- **Academic Writing** (22-26th Apr)
- **Latex** (6-8th May)
- **Artificial Intelligence** (tba)

PS: details regarding exact date, time, and location to be provided closer to the event

PAPER PRESENTATION AND DEBATE

(Every Period)

COMMITTEE

For Committee Members only
Committee Meetings (Every 2 weeks)
Game nights (Every Month)

BECOME A MEMBER!

Our committee is always open for motivated and dedicated people. If you wish to join us, our teams offer positions as:

- **Researcher** (require critical thinking and academic writing interest)
- **Supervisor** (require academic writing experience, connections with professionals are appreciated)
- **Event organiser** (require planning skills and time to attend the events)
- **Marketing assistant** (require a good eye for esthetic design and social media analytical skills)

**ARE YOU INTERESTED?
DO YOU HAVE ANY QUESTIONS?
STAY UP TO DATE AND FOLLOW US ON OUR SOCIAL S!**

INSTAGRAM

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LINKEDIN

The Digital Market Act

Authors: Edmunds Krumins and Jeanne Olla

1. Introduction

The Digital Markets Act (DMA) was approved by the European Parliament and Council in December 2022, and its rules have been applicable since May 2023. As of March 2024, tech giants such as Google, Apple, Facebook, Amazon, and Microsoft will have to comply with specific obligations set out by the DMA. The DMA is a comprehensive regulatory framework aimed at promoting fairness and competition in the digital sphere by mitigating the adverse effects of market dominance of digital gatekeepers. The European Commission designates gatekeepers based on market power, number of users, and importance to business users. Due to the new obligations, designated gatekeepers must provide access to their data to third parties, allow interoperability with other services, and avoid discriminating against business users. The DMA, promoted by the EU, aims to positively impact competition and innovation. However, achieving these goals may be challenging, given its impact on various market mechanisms. Some anti-competitive behaviours are well-known, but others may be in a grey area, requiring careful analysis. Moreover, some of the regulations may seem weak upon scrutiny. Nevertheless, the Act is an important step in the EU's market protection efforts. This paper aims to present an overview of the current state of the literature on the legal and economic implications of the Digital Market Act.

2. Literature Review

2.1 The DMA's Legal Impact

2.1.1 The Digital Market Act: a Law or a Regulation?

The Digital Markets Act (DMA) is a regulation within the EU that aims to ensure digital markets operate fairly. It addresses challenges like market power abuse, lack of transparency, and consumer protection. The DMA applies across all EU member states and establishes rules for digital gatekeepers to ensure fair competition and prevent them from disadvantaging smaller businesses and consumers. The DMA introduces obligations for gatekeepers, such as ensuring data portability and access to data and infrastructure. It also establishes a digital markets advisory committee. The DMA interacts with existing competition rules and utilises Art. 102 TFEU case law. National competition authorities (NCAs) collaborate with the Commission to monitor gatekeepers, promoting a cooperative approach to enforcement. The DMA introduces transparency obligations and aims to make antitrust assessments faster and more straightforward

2.1.2. Legal Advantages and Shortcomings:

Legal experts are analyzing the impact of the Digital Markets Act (DMA) on digital markets. DMA introduces obligations and prohibitions to ensure fair competition, contestability, and consumer welfare. By centralising the process, the DMA can conduct antitrust assessments more efficiently, making the process faster and simpler. This leads to quicker interventions and ensures that enforcement actions are taken promptly. However, scholars have also raised concerns about its adaptability to evolving digital market dynamics and potential conflicts with existing competition rules. Werden and Froeb (2019) underline the differences between EU and US antitrust approaches, emphasising that the EU system relies heavily on competitor complaints to the European Commission. The potential legal advantage of empowering competitors may raise concerns about exploiting the system for strategic purposes rather than genuine competition concerns. The DMA's effectiveness will depend on its ability to balance regulation and antitrust principles in the ever-evolving digital markets.

2.2. The DMA's Economic Impact

2.2.1. More Competition

The European Union (EU) has introduced the Digital Markets Act (DMA) to tackle the dominance of tech giants and promote a more competitive digital market landscape (Broadbent, M., 2020; Cabral et al., 2021; Katz, 2021). Cabral et al. (2021) report analyzes the Digital Market Act's regulations, highlighting its flexible approach and suggesting areas for improvement. One of these areas is the establishment of a "grey" and "black" list of anti-competitive behaviours. As the names suggest, behaviours on the blacklist would be deemed illegal meanwhile, the grey list would cover behaviours that may initially appear anti-competitive but have some economic justification (Cabral et al., 2021). Past examples of tying and bundling show that there are both positive and negative outcomes associated with the same behaviour, which supports Cabral et al.'s (2021) argument in favour of more flexibility toward these "grey" behaviours. However, behaviour involving self-preferencing, such as manipulation of algorithms to the profit of the mother firm, has a significant negative impact on the market and should definitely be blacklisted.

2.2.2. Better Consumer Prices

It is widely acknowledged in economics that monopolistic markets lead to higher prices and fewer choices for consumers (Fletcher et al., 2023). Intervention is particularly important in the digital market due to the self-reinforcing effects of data aggregation and networking. The Act offers advantages to consumers with its ex-ante approach, which does not require the burden of proof or lengthy and unfruitful action on the commission side (Podszun, R., 2022). As a result, gatekeeper companies will be more closely scrutinized, and consumers will be better protected from anti-competitive behaviour (Podszun, R., 2022). While this is a positive aspect of the DMA for customers, the rest of the regulation doesn't live up to its promise regarding protecting individual end users. The DMA does not address the issue of data privacy or provide adequate safeguards against algorithmic discrimination. Out of the 18 obligations of the Act, only six have a direct impact on end-users (Podszun, R., 2022). Furthermore, there is no mechanism in place that allows consumers or consumer representative associations to actively participate in any advisory board, investigatory or sanctioning powers (Podszun, R., 2022). This lack of consumer involvement raises concerns about the protection they receive (Fletcher et al., 2023). It also highlights the importance of collaboration between National Competition Authorities (NCAs) to address these issues (Drexl et al., 2023).

3. Discussion

In conclusion, the DMA has many tools at its disposal to force "gatekeepers" into fairer competitive practices and transparency. Firstly, the Act moved from a three-step approach of regulatory power to a one-step approach with ex-ante obligation applicable starting this March 2024. It integrates with existing competition rules, designates gatekeepers based on quantitative thresholds, and involves collaboration between the European Commission and national competition authorities. While legal scholars recognize its potential benefits, concerns exist regarding its departure from traditional antitrust models and potential conflicts with existing rules. The EU justified its decision by making promises regarding competition, innovation, and consumer prices in the European digital market. Many scholars have since assessed the potential impact of the DMA on the dimension mentioned above. While all agree that the regulation is not perfect, they support the potential benefits of competition and innovation for smaller firms and the resulting benefit for the consumer's choice. The DMA's impact raises the question of whether similar regulations are needed in other anticompetitive markets.

*The complete article, as well as all references, figures and appendixes can be found on our website.

Deconstructing Dutch GDP – A Comparison of Methodologies

Authors: Paul Haimerl and Max Nuboer

1. Introduction

It is well appreciated that economic development does not evolve in a steady fashion but is subject to recurring boom-and-bust cycles. An accurate understanding of this business cycle is crucial. The private sector economy relies on economic forecasts for investment decisions. Fiscal as well as monetary policy must adjust in accordance with the current economic regime to either cut recessions short or to leverage the benefits of an economic upturn. It is not hard to imagine countless similar motivations.

A large literature strand has emerged that uses quantitative methods to identify cycles in the real gross domestic product (GDP). These techniques decompose a single time series, like GDP, into two components: a short-run cycle and a long-term trend. As a consequence, these methods are referred to as trend-cycle decompositions.

However, despite the great number of proposed methodologies in recent years and an associated, seemingly never-ending discussion, the literature is yet to converge on an approach of disentangling the short-run cyclical component from the long-run trend of macroeconomic time series (see (Kim & Kim, 2020) and (Hodrick R. , 2020) for recent discussions). The heterogeneity in the literature also extends beyond the quantitative techniques to the qualitative space. Essentially, there are differing notions of what elementary features a trend or a cycle of macroeconomic indicators should include.

This paper estimates the Dutch business cycle and in turn highlights the methodological heterogeneity by applying a selected list of quantitative trend-cycle decomposition approaches. We validate the previous common findings of contradicting results among the popular techniques.

2. Methodology

We consider a range of popular quantitative trend-cycle decomposition techniques that cover most of the applied research. In particular, we include the Beveridge-Nelson (BN) decomposition (Beveridge & Nelson, 1981), a boosted Hodrick-Prescott (HP) filter (Phillips & Shi, 2020) as well as three versions of an unobserved components (UC) model: (i) without trend-cycle correlation (Clark, 1987); (ii) allowing for a nonzero trend-cycle correlation (Morley, Nelson, & Zivot, 2003); (iii) specifying a fractionally integrated trend component. Furthermore, these methods include a many interesting relationships among themselves. Moreover, they each can be assigned to slightly different qualitative interpretations of the business cycle and the associated trend component.

As described above, trend cycle decomp-ositions filter a long-run component, the trend, and a short-run part, the cycle from one singular time series. The trend captures the low frequency, slow moving patterns as an economy evolves over time. Examples for such processes are crucial technological changes and other long-lasting fundamental developments. The cyclical component on the other hand assumes non-persistent transitive dynamics. Such dependencies emerge when shocks affect the economy in the short-run only and quickly fade out in the subsequent periods. In a nutshell, the cycle is nterpreted as the boom-and-bust behaviour of an economy that occurs around a long-term GDP trend. Examples of cyclical shocks are energy price changes, wage rigidities or unanticipated policy measures.

The trend-cycle decomposition methods all separate the trend from the cyclical component by exploiting the different levels of persistence:

trend innovations are still present even long after they have occurred whereas cyclical innovations decay. However, the particular way in which this structural differentiation is imposed as well as some underlying assumptions differentiate the various approaches. In the interest of brevity, we refer to the full-length paper for a brief introduction to the respective quantitative approaches.

3. Data and Empirical Results

The basis of our analysis is a quarterly time series of Dutch real GDP, expressed in chained Euros, ranging from 1996 until 2023. Furthermore, seasonal effects are already netted out.

The observational horizon entails many interesting events and is subject to vastly different economic regimes. A brief list of noteworthy periods includes the recession in the wake of the Dot-Com bubble burst in the early 2000s; the boom-episode and subsequent downturn caused by the great financial crisis in 2008; a prolonged period of jittery European financial markets in the early 2010s; large upwards as well as downward movements in the economic development throughout and after the COVID-19 pandemic; the current high-interest rate regime.

After estimating the trend and cycle for every considered technique, we validate the typical result of contradicting inference. Previous empirical contributions to the trend-cycle decomposition literature almost exclusively focus on US GDP. We acknowledge that the US and the Netherlands are subject to different structural and economic conditions. Nonetheless, it is insightful to compare our results to the findings of other papers. Remarkable is the overall low amplitude of the cyclical component compared to previous studies. Most variance is attributed to the trend component. Only the cycle estimates of the UC-Frac model, our most flexible specification, mirrors the qualitative Dutch business cycle chronology to some extent. Furthermore, we also replicate the common insight of a large negative correlation between the trend and the cycle. This implies that upturns to the trend of GDP coincide with downturns in the cycle. Even though not very intuitive at a glance, such dynamics may occur when, e.g., workers are laid off after the introduction of automation.

Furthermore, we point out that there is no overall best quantitative technique. Different methods inherently produce estimates with varying stylistic characteristics. These also pertain to different qualitative interpretations of how an economic trend as well as a cycle should behave.

4. Conclusion

It is important to highlight that most similar empirical studies are based on a vastly more extensive observational horizon, spanning 60 years or more. Due to data availability, our application only includes just shy of 30 years' worth of quarterly observations. The short time span can limit the robustness of results and lead to unstable estimates. There do simply do not exist many observations that describe a relationship over a long time span such as 20 years or more. As a consequence, out inference is in part based on few usable data points which hurts the robustness.

In a similar vein, a shorter observed duration is also limiting from an economic perspective. Economic regimes such as the stagflation period of the 1970s are not reflected in our data. It is common for many macroeconomic variables that they appear to follow a linear trend in the short to medium term. Only when observing a considerate amount of time periods emerge the true underlying patterns. In consequence, trend and cycle characteristics may differ when extending the observational horizon.

*The complete article, as well as all references, figures ad appendixes can be found on our website.

The Critical Raw Materials Act

Author: Patricia Ortuño Camacho

1. Introducing the Policy

Strategic autonomy, originally a concept applied in geopolitics, has gained renewed significance in the European Union (EU) in the wake of COVID-19 vulnerabilities. This has prompted the EU to broaden its approach, leading to the emergence of Open Strategic Autonomy, particularly in the economic sector (Boin, 2019; Csernatoni, 2022; Gerhke, 2021; Helwig et al., 2021). The primary goal is to ensure a resilient supply of critical resources, strengthening the EU's global sovereignty in supply chains (von der Leyen, 2022). In this economic context, the EU is actively working towards reducing dependence on imported goods, with a specific focus on critical raw materials (CRMs). Various resolutions addressing CRMs have been proposed across EU institutions, with the Critical Raw Materials Act put forth by the Commission gaining notable attention despite its relatively short presence (Ragonnaud, 2023). This policy brief will delve into the effectiveness of the Critical Raw Materials Act, employing a multidisciplinary methodology to ensure the reliability and credibility of the findings. The evaluation will not only scrutinize whether the EU's efforts to establish strategic autonomy in critical raw material supply are on the right track and progressing at an appropriate speed but will also offer recommendations based on the insights gained.

2. The CRMA: Context and Objectives

The term "critical raw materials" originated from concerns about scarce resources vital for advanced technologies, leading the EU to heavily rely on imports and prompting efforts to secure them (European Commission, 2023; Findeisen & Wernert, 2023). The Critical Raw Materials Act, proposed by the Commission in March 2023 nd currently under EU trilogue review, aims to ensure EU access to CRMs, addressing supply vulnerabilities post-COVID and the Russian invasion of Ukraine (Leikin et al., 2023; von der Leyen, 2022). Despite the legislative deadlock, it can be potentially impactful for expanding and safeguarding EU access to CRMs.

Internally, the Critical Raw Materials Act sets targets for national capacities, and intends to diversify EU supply sources by 2030. It imposes restrictions on consuming no more than 65% of any strategic feedstock from a single third country and streamlines processes to support domestic projects. The Act encourages coordination of CRMs stocks among Member States, boosts financial support for research and innovation, and reinforces national initiatives for recyclability and circularity. Externally, the Act emphasizes diversifying suppliers through reliable partnerships, primarily with emerging markets and developing economies under the Global Gateway Strategy, to prevent the instrumentalization of CRMs trade for influence (Global Gateway, 2023; Mouel & Poitiers, 2023). Continuous cooperation and information exchange are advocated to strengthen these strategic partnerships.

3. Methodological Approach

Aligned with the objectives of the Critical Raw Materials Act, this section outlines the methodology for evaluating its effectiveness in promoting a sovereign and resilient supply of CRMs. First, the research focuses on internal action by assessing intra-EU cooperation on CRMs schemes. The policy review analyzes members of European Parliament (MEPs) participation in EU initiatives before and after the Commission's proposal, comparing data from 2019 to 2023. Secondly, the study addresses the expansion of international cooperation by examining the degree of supply diversification in CRMs imports. The

analysis narrows down to Strontium, one of four minerals common to the 2020 and 2017 CRM lists.

4. Findings

Evidences show that the arrival of the Critical Raw Materials Act in 2023 coincides with a remarkable increase in the number of EP Reports dealing with CRMs. Almost the double from the previous year. A great heightening can also be observed from 2020 to 2021. Noteworthy to highlight, no data was found for the year 2019.

A closer look at the nature of the votes reveals that while the 2023 legislation regarding CRMs has doubled the size relative to 2021, the participation measures have not changed substantially. This further reflects the impact that the Critical Raw Materials Act is having on the cooperation within the EU. It is worth noting that such a subtle change in voting attitudes is an understandable consequence when considering the large increase in the number of EP reports on the subject.

Furthermore, it's important to observe the expansion of international cooperation in terms of strontium supply. China emerges as the predominant exporter, constituting at least 95% of EU strontium imports each year, except for 2012. The Union's efforts to diversify strontium supply away from China have been insufficient, resulting in a 2.15% increase in EU dependence on Chinese strontium.

Argentina, initially playing a significant role in 2012 and momentarily mitigating the Union's over-dependence on China, witnessed a substantial decline in the subsequent years. Nevertheless, due to its substantial contribution of 50% to total EU imports in 2012, it still accounted for 6% of the total EU strontium imports throughout the period. However, the Union could have undertaken greater efforts throughout this timeframe to enhance the presence of Argentinian exports. Despite expectations of higher output, Spanish imports represent only 1.05% of total strontium imports from 2011 to 2023. Spain's unexpected absence is attributed to the fact that it accounted for almost 5% of EU strontium imports only in 2011. Additionally, Spanish strontium exports to the EU decreased by 4.05% during the period.

For Turkey, the figures closely resemble those of Spain, with Turkish exports becoming noticeable, especially from 2022-2023, albeit in small quantities. Turkey accounts for 0.66% of total EU strontium imports. However, the EU has gradually increased its strontium imports from Turkey by 1.89% over the period. Iran and Mexico, as minor exporters in this sample, do not constitute a representative percentage.

5. Recommendations

Based on the aforementioned considerati-ons, three recommendations are proposed for the EU to enhance the security of CRMs and reduce dependence on these resources. Firstly, given the observed increase in legislative activity related to CRMs and the positive impact on internal cooperation within the EP, there should be a concerted effort to advocate for the adoption of the Critical Raw Materials Act. Highlighting the correlation between the Act and increased legislative attention can serve as a persuasive argument, making adoption a crucial first step in effective strategic management. Secondly, we propose to reevaluate and adjust trade policies to incentivize diversification and reduce reliance on a single major supplier. Explore tariff adjustments and engage in diplomatic efforts to foster cooperation with alternative strontium-producing regions to guarantee robust and resilient supply chains. Finally, we encourage the EU to remain committed to the Open Strategic Compass and its mission of safeguarding multilateralism whenever possible, and acting autonomously whenever it must. This compass provides a guiding framework for the EU to be a resilient, independent, yet cooperative player on the uncertain global stage. By implementing these recommendations, the EU can take significant steps towards securing CRMs, reducing dependence, and fostering a resilient and independent position in the face of geopolitical and economic challenges.

*The complete article, as well as all references, figures and appendixes can be found on our website.

Debt, investments in education, and tax rates in Greece and Estonia: an empirical analysis

Author: Mareks Mateušs

1. Introduction

The aim of the paper is to find the connection between government debt, tax rates and investments in education. The intuitive relationship between these three variables is quite easy to grasp: higher taxes imply lower public debt, because government can afford financing different projects by the use of its own tax revenues. In turn, higher investments in education should increase aggregate output in economy because more educated, read productive, workers can produce more in a given period of time. Therefore, if output increases, its tax revenues should increase because of an increased tax base and, as a consequence, government borrowing should decrease. However, as it turns out, it is hard to find an empirical confirmation of this logic.

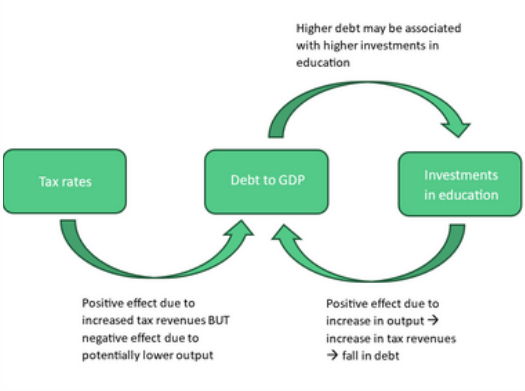
2. Data

I tested this aforementioned hypothesis on the example of Greece and Estonia. These countries are both members of the European Union and are supposed to follow the same criteria regarding the accumulation of public debt. However, on practice, they are completely different: Greek debt/GDP crossed a 200 mark recently, while Estonian debt/GDP is around 20 percent and much less volatile than Greek. The data used in this study was accessed through Eurostat and IMF databases and covers the period from mid-1990's till early 2020's.

3. Analysis

So, what could go wrong in this setup. The answer lies in behavior of tax rates over time, given time period used in the study, and mutual relationship between all three variables.

Supposedly simple model turned to somewhat complicated due to ambiguous effect of tax rate and investments in education on general output. For instance, besides the classical textbook effect of increased taxes on borrowing, it may actually cause an even further increase in borrowing. Example could be a migration of labor to other countries which causes lower total tax base in economy and lower tax revenues to the budget. Turning to the relationship between investments in education and government debt, it could be that not only former affects latter but the opposite. For example, government could borrow more money to invest in education, thus the effect from increased investments on education on borrowing via increased output and tax revenues could be indeed cancel out. This is a task of further empirical study to find this genuine, net effect between two variables. This can be illustrated as in the figure.



I run two multiple regression models where debt/GDP is the dependent variable and taxes, investments in education are independent variables. All variables were expressed in difference terms due to presence of stochastic trend in their initial form. The output of regression models can be see in table below.

It can be seen that, in case of Estonia, none of two variables is actuallu significant at any level, while there is some degree of significance in case of Greece. Namely, in the latter case, investments in education cause a massive increase in debt-to-GDP and that's exactly because of opposed effect of debt/GDP to investments in education. Government accumulates high debt to finance its operations, including investments in education. Based on the evidence that this is not the case in Estonia, one could explore further the difference in signs of effect of different elements of government expenditure on debt/GDP based on whether the country runs balanced (or almost balanced) budget or not.

4. Conclusion

The advantage of testing this model lies in its ability to compare different countries with different policy approaches in budget planning. However, it is quite complicated to disentangle these opposing effects of investments in something that is supposed to boost productivity and, as a consequence, output and the burden that high budget deficit and intense borrowing transmits to investments.

The disadvantage of this specific setting is, first and for most, relatively short period of observations. I would expect more visible effect in longer term. Second, and it is partly connected to the first, low variability of tax rates. Again, if one would look at the longer period, tax rates usually change drastically during shifts in fiscal policies and this usually takes place more often in longer periods of time.

i	(1)	(2)
Δinv_i	2.455	20.535*
	(1.756)	(8.721)
Δtax_i	-0.130	0.973
	(0.649)	(1.911)
Sample size	22	22
R^2	0.111	0.295
Adjusted R^2	0.012	0.217

Note: The number in parentheses indicates standard error. * shows a significance at 10 percent. Regression (1) applies to data on Estonia, (2) applies to data on Greece.

*The complete article, as well as all references, figures and appendixes can be found on our website.

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