Click here for the latest version

ANDRESA LAGERBORG – CV

Nationality: Brazilian and Swedish ¤ +1 2026797279 ¤ alagerborg@imf.org ¤ https://sites.google.com/site/alagerborg/

EDUCATION

Ph.D. Economics – European University Institute (EUI), Fiesole, Italy — Sep 2012–Jun 2018
Advisors: Evi Pappa, Juan Dolado

- EUI Vilfredo Pareto Prize for 2018 Best PhD Thesis in Economics: "Essays in Macroeconomics"
- Visiting Ph.D. researcher at the London School of Economics, European Doctoral Exchange Programme — Sep 2014–Sep 2015
- MRes. Economics – European University Institute, Fiesole, Italy — Sep 2012–Jul 2013

MSc. Economics and Social Sciences – Bocconi University, Milan, Italy (GPA: 28.7/30) — Sep 2007–Jun 2009

BSc. Econometrics and Mathematical Economics – London School of Economics (2:1 with Honors) — Sep 2004–Jun 2007

WORK EXPERIENCE

International Monetary Fund – Economist, Washington D.C. — Sep 2018–present

- **World Economic Studies, Research Department (Jul 2024–present)**
  - Production of the IMF's semi-annual World Economic Outlook flagship publication, including economic research on select topics of high relevance for the global economy (e.g. demographics, conflicts).
- **Fiscal Policy and Surveillance, Fiscal Affairs Department (Mar 2020–Jul 2024)**
  - Fiscal economist for *Argentina* (Jan 2023–Jul 2024), *Honduras* (Jun 2022–Jan 2023), and *Georgia* (Mar 2020–Jun 2022), negotiating fiscal targets and other IMF program conditionality with government authorities, and covering structural fiscal issues (e.g., tax policy, pensions, subsidies, social assistance, fiscal risks, SOE reform, fiscal rules), fiscal projections, and debt sustainability analysis.
  - Production of the IMF's semi-annual Fiscal Monitor publications, including analytical works on smart Covid-19 containment strategies, the impact of Covid-19 on education and health inequality, determinants of the time-varying relation between sovereign spreads and debt levels, and nonlinear macro-fiscal effects of fiscal consolidations.
  - Key contributor to fiscal rules workstream, including participation in Technical Assistance missions (*Honduras*, *Chile*, *Indonesia*), support to country teams in rule design/calibration, review of fiscal frameworks for around 30 countries, co-author of WP on Green Fiscal Rules, WP on Fiscal Rules and Fiscal Councils, WP on Reforming the EU fiscal framework, SDN on Return to Fiscal Rules, forthcoming WP on Fiscal Rule Countercyclicality, and front office outreach material preparation.
- **Regional Studies, African Department (Sep 2018–Mar 2020)**
  - Production of the IMF's semi-annual Regional Economic Outlook for sub-Saharan Africa, including analytical chapters on climate change adaptation.
  - Growth-at-risk analysis using quantile panel local projection methods to estimate distributions of projected GDP growth (for SSA region and Benin Article IV) and decomposition of driving factors.
  - Participated in Article IV missions to *Eritrea* and *Botswana*, covering the real sector. Analytical work included simulations of a fiscal rule with a long-run target for returns on assets and medium-term floor on assets (complementing the debt ceiling).

The World Bank – Consultant — Mar 2015–Dec 2015

- Appointed to co-author paper studying the fundamental drivers of the real exchange rate and estimating exchange rate misalignment in Argentina using cointegration analysis.

European Central Bank – PhD Trainee, Prices and Costs, DG Economics, Frankfurt — Jul 2015–Dec 2015

- Appointed for paper on "Missing inflation in the Eurozone: shocks or structural changes?", employing state of the art Bayesian estimation techniques of a nonlinear DSGE model with time-varying parameters, employing particle and Kollmann (2016) filters.

International Monetary Fund – Research Analyst, Western Hemisphere Regional Studies, Washington D.C. Jul 2011–Jul 2012

- Analysis of regional macroeconomic and policy developments and production of the biannual *Regional Economic Outlook*.
- Research studies on: (i) estimating the Phillips Curve and time-varying NAIRU, and (ii) the role of financial integration and fundamentals in emerging market resilience to global financial shocks.

The World Bank – Junior Professional Associate, Economic Policy Unit, Washington D.C. — Sep 2009–Jul 2011
Research analyst for *Brazil* (05/10 – 07/11) and the *Caribbean* (09/09 – 05/10).

- Production of medium-term macroeconomic projections and fiscal/debt sustainability forecasting models.
- Budget support loan issuance (worth up to US$1 billion) to various national and subnational governments.
- Lead author of Brazil Monthly Report macro outlook section (externally distributed).
- Key contributor to research studies of credit markets in Brazil and growth and productivity in Jamaica.
- Design of a debt framework solution involving analyzing the structure, decomposition, and sustainability of public debt in the Caribbean (presented to CARICOM Heads of Government).

SKILLS & INTERESTS

Research fields: Macroeconomics, Fiscal Policy, Macro-Labor, Demographics, Development Economics, Monetary Policy.

IT proficiency: Matlab, Stata, Eviews, Analytica, Haver Analytics, Datastream, WITS, Bloomberg, Microsoft Office.

Languages: English, Swedish, and Portuguese (Native), Italian (Proficient), Spanish (Advanced), French (Beginner).

SCHOLARSHIPS & AWARDS

Vilfredo Pareto Prize for the Best PhD Thesis in Economics, European University Institute	2018
Ph.D. Fellowship Grant, European University Institute	2012-2017
Ph.D. Stipend, Dr. Tech. Marcus Wallenberg Foundation for Education in International Industrial Entrepreneurship	2012
Merit Award Scholarship (full tuition waiver, free housing, & cash stipend) for MSc. at Bocconi University	2007, 2008

TECHNICAL, TEACHING, and RESEARCH ASSISTANCE

IMF Capacity Development, Course Teacher to Government Officials, Fiscal Policy and Forecasting, Singapore	(2 weeks) 07/24
IMF Technical Assistance, Fiscal Considerations in Managing Stabilization Funds, Chile	(2 weeks) 07/23
Graduate Teaching Assistant, EC210 Macroeconomic Principles, London School of Economics	09/14 – 07/15
Research Assistance to Prof. Gianluca Benigno, London School of Economics	10/14 – 07/15
Research Assistance to Prof. Vincenzo Galasso, Bocconi University	02/09 – 05/09

ACADEMIC REFERENCES

Prof. Evi Pappa, Universidad Carlos III de Madrid**,** Department of Economics; ppappa@eco.uc3m.es

Prof. Juan Dolado, Universidad Carlos III de Madrid, Department of Economics; dolado@eco.uc3m.es

Prof. Morten Ravn, University College London, Department of Economics; m.ravn@ucl.ac.uk

SELECT PEER-REVIEWED PUBLICATIONS

Sentimental Business Cycles with E. Pappa and M. Ravn, *Review of Economic Studies,* Vol. 90(3), p.1358–1393, 2022.

We estimate the dynamic causal effects of consumer sentiment shocks in the US. We identify autonomous changes in survey evidence on consumer confidence using fatalities in mass shootings as an instrument. We find the instrument to be significant for an aggregate index of consumer expectations and also back up the identification scheme with micro evidence that exploits the geographical variation in mass shootings. Sentiment shocks have real macroeconomic effects. A negative sentiment shock is recessionary: It sets off a persistent decline in consumer confidence and induces a contraction in industrial production, private sector consumption, and in the labor market, while having less evident nominal effects. Finally, sentiment shocks explain a non-negligible part of the cyclical fluctuations in consumer confidence and real macroeconomic aggregates.

Does economic security really impact on gun violence at U.S. schools? with E. Pappa and M. Ravn, *Nature Human Behaviour 3,* p. 198–199, 2019.

We challenge Pah et al's (2017) claim that unemployment (and economic insecurity more generally) causes US school shootings. We show that the apparent relationship between school shootings and unemployment derives from lack of control for contagion of mass shootings; once such contagious effects are taken into account, there is no evidence that unemployment predicts the number of US school shootings.

Do labor market institutions matter for business cycles? with S. Gnocchi and E. Pappa, *Journal of Economic Dynamics and Control*, Vol. 51, p. 299–317, 2015.

Using panel data of 19 OECD countries observed over 40 years and data on specific labor market reform episodes we conclude that labor market institutions matter for business cycle fluctuations. Spearman partial rank correlations reveal that more flexible institutions are associated with lower business cycle volatility. Turning to the analysis of reform episodes, wage bargaining reforms increase the correlation of the real wage with labor productivity and the volatility of unemployment. Employment protection reforms increase the volatility of employment and decrease the correlation of the real wage with labor productivity. Reforms reducing replacement rates make labor productivity more procyclical.

OTHER PUBLICATIONS

Can Healthy Aging Boost Labor Supply? Evidence from Korea with B. Gruss, E. Huang, D. Noureldin, and K. Ozhan, *KDI Journal of Economic Policy*, forthcoming. (*IMF Working Paper* version available above)

This paper investigates the role of 'healthy aging' in boosting labor supply in Korea. We first use microdata from surveys to assess whether there is evidence that the physical abilities of individuals aged 50 and above have been improving over subsequent cohorts. We then investigate whether health improvements among older workers influence their labor market outcomes, such as the decision to supply labor and to retire. We use an instrumental variable approach to enable causal analysis, proxying exogenous variations in health with the development of certain chronic diseases. Our findings reveal that (i) physical health indicators have improved on average across birth cohorts, providing evidence in favor of 'healthy aging' in Korea, and (ii) better health positively affects the probability of participating in the labor force and postponing retirement. Overall, our results suggest that healthy aging has increased the labor supply of older individuals in Korea by around 1.7 percentage points per year during the 2006-20 period. The results for Korea are qualitatively comparable and somewhat stronger than those for other Asian countries with available survey data.

The Rise of the Silver Economy: Global Implications of Population Aging with B. Gruss, E. Huang, D. Noureldin, and K. Ozhan, IMF *World Economic Outlook*, Chapter 2, April 2025.

As the global population ages, economies worldwide are experiencing significant demographic shifts with profound implications. Chapter 2 explores the rise of the "silver economy," focusing on the extent of healthy aging and its impact on labor markets, the broader economic implications of demographic changes, and the role of targeted policies in mitigating the adverse effects of aging. The analysis reveals that while population aging poses challenges such as slower growth and increased fiscal pressures, healthier aging trends offer a silver lining by boosting labor force participation, extending working lives, and enhancing productivity. The chapter underscores the importance of policies that support healthy aging, increase labor force participation among older individuals, and close gender gaps in the workforce. By leveraging these strategies, countries can harness the potential of the silver economy to boost growth and rebuild fiscal buffers amid demographic headwinds.

Green Fiscal Rules? Challenges and Policy Alternatives with Francesca Caselli and Paulo Medas, *IMF Working Paper*, 2024.

This paper studies the impact of green fiscal rules – designed to preserve climate-related spending – on debt dynamics. Simulations of green rules that exempt green spending from the rule for an emerging market economy illustrate that they can lead to unsustainable debt dynamics or an overly tight non-green budget when the net zero emissions goal is pursued mostly using spending-based instruments (e.g., investment and subsidies). Instead, a more appropriate mix of climate policies, including actively employing carbon pricing, should be pursued within the budget process. Countries should hence develop 'green' medium-term fiscal frameworks to integrate climate change considerations into fiscal policy design in a more comprehensive manner.

The Return to Fiscal Rules with F. Caselli, H. Davoodi, C. Goncalves, G. Hong, P. Medas, and A. Nguyen, *IMF Staff Discussion Notes* No. 2, 2022.

Adoption of fiscal rules and fiscal councils continued to increase globally over the last decades based on two new global datasets. During the pandemic, fiscal frameworks were put to test. The widespread use of escape clauses was one of the novelties in this crisis, which helped provide policy room to respond to the health crisis. But the unprecedented fiscal actions have led to large and widespread deviations from deficit and debt limits. The evidence shows that fiscal rules, in general, have been flexible during crises but have not prevented a large and persistent buildup of debt over time. Experience shows that deviations from debt limits are very difficult to reverse. The paper also presents evidence on the benefits of a good track record in abiding by the rules. All these highlight the difficult policy choices ahead and need to further improve rules-based fiscal frameworks.

Reforming the EU Fiscal Framework: Strengthening the Fiscal Rules and Institutions with N. Arnold, R. Balakrishnan, B. Barkbu, H. Davoodi, W. Lam, P. Medas, J. Otten, L. Rabier, C. Roehler, A. Shahmoradi, M. Spector, S. Weber, and J. Zettelmeyer, *IMF Departmental Paper* No. 14, 2022.

Adoption of fiscal rules and fiscal councils continued to increase globally over the last decades based on two new global datasets. During the pandemic, fiscal frameworks were put to test. The widespread use of escape clauses was one of the novelties in this crisis, which helped provide policy room to respond to the health crisis. But the unprecedented fiscal actions have led to large and widespread deviations from deficit and debt limits. The evidence shows that fiscal rules, in general, have been flexible during crises but have not prevented a large and persistent buildup of debt over time. Experience shows that deviations from debt limits are very difficult to reverse. The paper also presents evidence on the benefits of a good track record in abiding by the rules. All these highlight the difficult policy choices ahead and need to further improve rules-based fiscal frameworks.

Fiscal Rules and Fiscal Councils: Recent Trends and Performance during the COVID-19 Pandemic with H. Davoodi, P. Elger, A. Fotiou, D. Garcia-Macia, X. Han, W. Lam, P. Medas, *IMF Working Paper*, No. 11, 2022.

Adoption of fiscal rules and fiscal councils continued to increase globally over the last decades based on two new global datasets. During the pandemic, fiscal frameworks were put to test. The widespread use of escape clauses was one of the novelties in this crisis, which helped provide policy room to respond to the health crisis. But the unprecedented fiscal actions have led to large and widespread deviations from deficit and debt limits. The evidence shows that fiscal rules, in general, have been flexible during crises but have not prevented a large and persistent buildup of debt over time. Experience shows that deviations from debt limits are very difficult to

reverse. The paper also presents evidence on the benefits of a good track record in abiding by the rules. All these highlight the difficult policy choices ahead and need to further improve rules-based fiscal frameworks.

Smart Containment: Lessons from Countries with Past Experience with A. Fotiou, *CEPR Covid Economics,* Issue 74, 2021.

Following the Great Lockdown in 2020, it is important to take stock of lessons learned. How effective have different containment measures been in slowing the spread of Covid-19? Have containment measures been costly in terms of economic growth, fiscal balances, and accumulated debt? This paper finds that countries with previous SARS experience acted fast and "smart" and were able to contain the virus by relying mainly on public health measures —testing, contact tracing, and public information campaigns—rather than stay-at-home requirements. Using past coronavirus outbreaks as an instrumental variable, we show that countries with past experience were able to contain the virus in a smart way, reducing transmission and deaths while also experiencing higher economic growth in 2020.

Estimating an equilibrium exchange rate for the Argentine peso with A. Coppola and Z. Mustafaoglu, *World Bank Policy Research Working Paper,* WPS7682, 2016.

This paper assesses the equilibrium value of the Argentine peso exchange rate based on the country's economic fundamentals and compares it with the official exchange rate value. The paper estimates a behavioral equilibrium exchange rate model that allows for movements in the equilibrium real effective exchange rate based on changing economic fundamentals, using monthly data from 1980 to 2015. The analysis identifies four key fundamentals driving the equilibrium exchange rate in Argentina: terms of trade, productivity differentials, foreign currency reserves, and trade openness. Based on these fundamentals, before the exchange rate reunification that took place at the end of 2015, the Argentine peso was overvalued by 39 percent. The results are robust to alternative estimation approaches.

Can sustainable poverty reduction be achieved with little or no economic growth? The case of Jamaica with D. Medvedev, Z. Mustafaoglu, and M. Paris, *Review of Economics and Institutions,* Vol. 4, Issue 2, 2013.

Can poverty decline with little growth in real GDP? This paper examines the case of Jamaica, where the poverty headcount halved between 2003 and 2007 despite real per capita GDP growth of just 1.1 percent per year, by analyzing the factors contributing to the observed reduction in poverty using household and labor force surveys. It sets out by providing a sectoral, demographic, and spatial picture of the evolution of poverty and finds that poverty reduction has been broad based, benefitting both rural and urban areas. Nearly three quarters of the poverty reduction is attributed to growth in average household consumption, which outpaced GDP growth due to large remittance inflows, and one quarter to narrowing inequality. In turn, around half of the reduction of inequality is explained by narrowing returns to education and declining sectoral wage gaps.

ONGOING RESEARCH

Labor Market Implications of Healthy Aging with B. Gruss, E. Huang, D. Noureldin, and K. Ozhan, *IMF Working Paper*, 2025.

This paper provides new cross-country evidence on "healthy aging"—the extent to which populations age in better health across birth cohorts—and how this shapes labor market outcomes for older workers. Using harmonized microdata focused on older populations in 41 countries during 2000-22, our findings reveal (i) a broad-based healthy aging phenomenon, whereby older-age physical, cognitive, and mental health have improved systematically across birth cohorts, and (ii) that better health—instrumented by the incidence of chronic diseases—raises labor earnings, labor productivity, and labor supply along both extensive and intensive margins. Quantitatively, a decade of cohort-on-cohort improvements in health—particularly for cognitive abilities—is estimated to have raised older individuals' probability of labor force participation by about 20 percentage points, their weekly hours worked by around 6 hours, and their productivity by around 30 percent. Together, our results highlight that healthy aging can generate sizeable labor market dividends for the older-age population.

A Silver Lining in the Silver Economy: Macroeconomic Implications of Healthy Aging with B. Gruss, E. Huang, D. Noureldin, and K. Ozhan, *IMF Working Paper*, forthcoming.

This paper investigates whether improvements in older adults' health can mitigate the growth slowdown and rising fiscal pressures induced by population aging. We integrate detailed microdata analysis with a multi-country, heterogeneous-agent overlapping-generations general equilibrium model. Empirically, we document substantial gains in cognitive capacity among individuals aged 50 and older, which translate into higher earnings, greater labor-force participation, and increased hours worked. In our model simulations, these healthy-aging trends contribute about 0.4 percentage point to global GDP growth over 2025–2050, partially counteracting the drag from population aging. We then simulate a healthier-aging policy—modeled as a gradual convergence of older adults' cognitive health to Swedish benchmark levels—and compare its impact with measures to raise female labor-force participation and extend effective retirement ages across economies. Our findings indicate that converging to Swedish-level healthy aging could alone boost global average annual GDP growth by roughly 0.2 percentage point in the twenty-first century, complementing other labor-market reforms in mitigating the economic drag from aging.

Electricity Subsidy Reform in Argentina: Fiscal and Distributional Implications with John Hooley and Fabiana Machado, *IMF Working Paper*, forthcoming.

Electricity subsidies in Argentina at 1.4 percent of GDP in 2022 are the highest in Latin America and tariffs among the lowest. In the context of Argentina's fiscal consolidation, in October 2022 the government introduced a new tariff segmentation scheme which increased the wholesale electricity price to cost recovery levels for high income users with smaller increases for low- and middle-income consumers. We estimate the fiscal and distributional implications of the scheme and compare it to alternative reform options using household expenditure survey data. We find that while introduction of the segmentation scheme was progressive, fiscal savings were limited/negative. Targeting of subsidies could be improved, whereby alternative reform options could shield vulnerable households while yielding fiscal savings of around 2 percent of GDP.

Fiscal Rules and Countercyclicality *(with Francesca Caselli)*

This paper provides new empirical evidence on the countercyclicality of fiscal rules in response to recessions. We estimate panel local projections for 71 advanced and emerging markets spanning 1985—2019. Endogeneity concerns are addressed using: (i) a difference-in-difference estimation, and (ii) a multi-treatment effect methodology that jointly models the probability of entering a recession and adopting a fiscal rule. On average, fiscal policy is found to be procyclical, as evidenced by countries reducing government spending in recessions and their aftermath, with no difference detected across countries with or without fiscal rules. However, for the subsample of advanced economies, fiscal rules are found to increase fiscal policy procyclicality, led by cuts in current spending and driven by countries with limited fiscal space relative to the rule limits. Procyclicality is mitigated for flexibly designed rules and when rules successfully incentivize countries to build buffers.

Climate Sentiment Shocks (*with Jose Nicolas Rosas)*

We provide new empirical evidence on the dynamic causal effects of climate-related negative expectation shocks. We identify exogenous variation in U.S. consumer confidence expectations using natural disaster damages occurring abroad as an instrument. Our instrument sets off a deterioration in consumer sentiments about the economy. In turn, a negative climate sentiment shock is recessionary, triggering a persistent decline in consumer confidence and a contraction in both industrial production and the labor market. Simultaneously, consumer prices rise, akin to the effects of a negative supply shock. Monetary policy responds primarily to the output gap rather than inflation, further amplifying price effects. Macroeconomic uncertainty increases, and real stock prices decline with a lag, distinguishing this shock from standard uncertainty and news shocks in the literature. Finally, we show that climate sentiment shocks account for a non-negligible portion of cyclical fluctuations in consumer confidence and key real macroeconomic aggregates.

Confidence and Local Activity: An IV Approach

This paper investigates whether exogenous variations in consumer sentiment have real effects on the economy. To this end, I study individual level monthly data on confidence regarding the aggregate U.S. economic outlook drawn from the University of Michigan Survey of Consumers. In order to address endogeneity of consumer confidence to economic fundamentals, I propose an instrumental variable (IV) approach. Specifically, I argue that school shootings constitute an exogenous source of variation in local sentiments, generating significant drops in consumer confidence for residents in the county where they occur. I then demonstrate that exogenous drops in sentiment reduce individual consumer appetite for purchasing durable goods. At the county level, I use local projection IV to estimate the dynamic impact of consumer sentiments on local unemployment. I find that a decrease in county level confidence causes a short-lived but significant rise in county unemployment rates.

Do stock market booms anticipate baby booms?

This paper studies the procyclical nature of fertility in the U.S. employing a VAR and DSGE perspective. I find that fertility responds positively to: (i) current economic conditions—TFP shocks and (negative) unemployment shocks, as well as to (ii) expectations about future economic conditions—consumer confidence expectations and stock price news shocks. I complement these results with a DSGE model that incorporates fertility into a simple RBC model. Fertility is irreversible, children provide households with utility, and are associated with costs of two types: consumption—entering the budget constraint, and time—away from leisure and work. The model proposes two channels causing fertility to be procyclical. First, fertility turns out to be procyclical when the consumption cost of children is high, but becomes countercyclical when their cost is low. Second, I aim to extend this model by introducing credit frictions and analyzing a role for policy in attaining optimally countercyclical fertility, in the spirit of the education literature. If agents had access to perfect credit markets they would choose to forgo working during recessions when childbearing costs are lower (substitution effects would dominate income effects) but under credit constraints childbearing becomes procyclical.

Do labor market institutions matter for fertility? *(with Andrea Camilli)*

Using annual data for 20 OECD countries over the period 1961—2014, we study whether labor market institutions (LMIs) not targeted to maternity impact the total fertility rate (TFR). We distinguish between employment rigidities (ER) and real wage rigidities (RWR), since the former reduces and the latter amplifies the response of the business cycle to shocks. Panel regressions and principal component analysis reveal that ER, such as employment protection and union strength, increase TFR. On the other hand, RWR, proxied by the centralization of wage bargaining and unemployment benefits, reduce TFR. We also find evidence that unemployment volatility reduces fertility whereas wage volatility raises fertility. Thus, to the extent that labor market institutions affect unemployment and wage volatility, they may also affect fertility. We complement our analysis with a DSGE model that incorporates households' fertility decision as well as unemployment and wage rigidities. We find that downward wage rigidities amplify real contractions in response to negative demand shocks and lead to large drops in employment and fertility.

Missing inflation in the Eurozone: shocks or structural changes*? (with Johan Grip, Benedikt Kolb, and Carlos Montes Galdón)*

Inflation in the euro area has been far below the ECB's target since 2013. This paper investigates the relative contributions of economic shocks and structural changes in explaining these inflation dynamics. To this end, we estimate an open-economy New Keynesian DSGE model at 2nd order employing the estimation method of Kollmann (2015), which is a recent improvement over the increasingly popular particle filter for nonlinear models. The model economy has search and matching on the labor market and asymmetric adjustment costs for investment, wages and employment as in Abbritti and Fahr (2013), an open-economy setting with incomplete pass-through of foreign prices as in Justiniano and Preston (2010), and frictions and shocks similar to Smets and Wouters (2007). We allow for time-varying parameters that can be mapped into labor and product market reforms in the Eurozone.