

Artur F. TOMECZEK 

SGH Warsaw School of Economics

artur.tomeczek@sgh.waw.pl

THE SECULAR STAGNATION HYPOTHESIS AND THE FUTURE OF EUROPE'S ADVANCED ECONOMIES

ABSTRACT The secular stagnation hypothesis originated in the late 1930s when Alvin Hansen proposed that the American economy will experience a prolonged depression because of the slowdown in demographics. Widely discussed in the aftermath of the Great Depression, interest in this hypothesis has waned as the world entered a period of rapid economic growth after World War II. In the years following the Great Recession, the secular stagnation hypothesis has once again come to the forefront of economic research when Lawrence Summers introduced the so-called “new secular stagnation hypothesis.” This article aims to establish whether the secular stagnation hypothesis is relevant to the future of Europe’s advanced economies. Two main symptoms of secular stagnation (demographic slowdown and decline in the natural rate of interest) are especially noticeable in Western Europe. The article has three parts. Part one contains a theoretical overview of the secular stagnation hypothesis. Part two comprises the empirical analysis of the macroeconomic situation in selected advanced economies in Europe and a short review of findings in the literature on the natural rate of interest. Part three identifies possible future problems and provides brief policy recommendations. I conclude that Italy, and to a lesser degree, Spain and Germany, are the countries most vulnerable to secular stagnation.

Keywords: secular stagnation, natural rate of interest, advanced economies, central banking, zero lower bound

1. INTRODUCTION

The secular stagnation hypothesis originated in the late 1930s when Alvin Hansen proposed that the American economy will experience a prolonged depression because of the slowdown in demographics. Widely discussed in the aftermath of the Great Depression, interest in this hypothesis has waned as the world entered a period of rapid economic growth after World War II. In the years following the Great Recession, the secular stagnation hypothesis has once again come to the forefront of economic research when Lawrence Summers introduced the so-called “new secular stagnation hypothesis.”

This article aims to establish whether the secular stagnation hypothesis is relevant to the future of Europe’s advanced economies. Two main symptoms of secular stagnation (demographic slowdown and decline in the natural rate of interest) are especially noticeable in Western Europe. The article has three parts. Part one contains a theoretical overview of the secular stagnation hypothesis. Part two comprises the empirical analysis of the macroeconomic situation in selected advanced economies in Europe and a short review of findings in the literature on the natural rate of interest. Part three identifies possible future problems and provides brief policy recommendations.

2. THE SECULAR STAGNATION HYPOTHESIS

The secular stagnation hypothesis started as a response to the state of the American economy ravaged by the Great Depression. Hansen¹ proposes that economic growth has been the result of rapid population growth. As the population stabilizes, the economy changes, and so does its output. With aging societies, consumption and investment stop growing, and without new resources, countries become unable to push their economic and technological “frontier.” Hansen² believes that economic theory needs to change its perspective when analyzing the factors of long-run economic growth: *Not until the problem of full employment of our productive resources from the long-run, secular standpoint was upon us, were we compelled to give serious consideration to those factors and forces in our economy which tend to make business recoveries weak and anaemic and which tend to prolong and deepen the course of depressions. This is the essence of secular stagnation – sick recoveries which die in their infancy and depressions which feed on themselves and leave a hard and seemingly immovable core of unemployment.*

According to Hansen, the business cycle theory of his time was ill-equipped to combat the effects of the Great Depression. The main solution proposed by Hansen³ in

¹ A.H. Hansen, “Economic Progress and Declining Population Growth”, *American Economic Review*, vol. 29, no. 1 (1939), p. 7.

² *Ibid.*, p. 4.

³ *Ibid.*, pp. 13-14.

battling the depression is a very active role of the state in the economy and a sufficiently significant increase in public expenditure – a proposal that is undoubtedly similar to the actual policies undertaken during the Great Recession of 2008-2009. Hansen⁴ also realizes that economic growth needs to be stable and less volatile. With that in mind, economic policy should aim to minimize the amplitudes of economic cycles. Again, his notion is strikingly visible in current macroprudential policies.

At the time, the response of mainstream economics to Hansen's theory was polarizing. Higgins,⁵ Niehans,⁶ and Keirstead⁷ supported it, while opponents included Burns,⁸ Simons,⁹ and Terborgh.¹⁰ After World War II ended, the United States emerged as a global superpower with basically unlimited economic potential. This post-Great Depression period of high growth has been referred to as secular exhilaration.¹¹ Secular exhilaration is not an antithesis of secular stagnation theory, but rather its essential element.

During the post-war decades, the economy was booming, and secular stagnation was mostly forgotten. If economists wrote about it, it was to show their disagreement with the secular stagnation hypothesis. Rothbard¹² claims that Hansen's theory *said nothing about dynamic change or about the real world at all*, while Mankiw¹³ considers secular stagnation to be a *dubious Keynesian proposition*.

The secular stagnation hypothesis has returned to the center of mainstream economics in the aftermath of the Great Recession. The direct trigger for the sudden economic collapse was obvious (subprime mortgage crisis and the bankruptcy of Lehman Brothers). However, economists have varied tremendously in providing the definitive underlining causes of prolonged economic depression in numerous countries following 2009. One of the answers is the possible advent of secular stagnation.

As a concept, secular stagnation, without a doubt, belongs to demand-side economics. The so-called "new secular stagnation hypothesis," introduced by Summers,¹⁴ focus-

⁴ A.H. Hansen, *Fiscal Policy and Business Cycles*, New York, NY 1941, p. 390.

⁵ B. Higgins, "The Concept of Secular Stagnation", *American Economic Review*, vol. 40, no. 1 (1950).

⁶ J. Niehans, "Economic Growth with Two Endogenous Factors", *The Quarterly Journal of Economics*, vol. 77, no. 3 (1963).

⁷ B.S. Keirstead, *The Theory of Economic Change*, Toronto 1948.

⁸ A.F. Burns, *Economic Research and the Keynesian Thinking of Our Times*, New York, NY 1946.

⁹ H. Simons, "Hansen on Fiscal Policy", *Journal of Political Economy*, vol. 50, no. 2 (1942).

¹⁰ G. Terborgh, "Dr. Hansen on 'The Bogey of Economic Maturity'", *The Review of Economics and Statistics*, vol. 28, no. 3 (1946).

¹¹ D. Hamberg, "Income Growth in Secular Stagnation and Inflation", *The Economic Journal*, vol. 63, no. 251 (1953); P. Samuelson, "Lord Keynes and the General Theory", *Econometrica*, vol. 14, no. 3 (1946).

¹² M.N. Rothbard, "Breaking out of the Walrasian box: The Cases of Schumpeter and Hansen", *The Review of Austrian Economics*, vol. 1, no. 1 (1987), p. 106.

¹³ G.N. Mankiw, "The Reincarnation of Keynesian Economics", *NBER Working Paper Series*, no. 3885 (1991), p. 5.

¹⁴ L.H. Summers, "US Economic Prospects: Secular Stagnation, Hysteresis, and the Zero Lower Bound", *Business Economics*, vol. 49, no. 2 (2014); idem, *Reflections on the 'New Secular Stagnation Hypothesis'*, in

es on the natural rate of interest (equilibrium real rate of interest, R^*), deflation, and the demographic slowdown. In short, the secular stagnation hypothesis from the 1930s focused exclusively on fiscal policy, while its modern contemporary introduces vital monetary policy elements. Theoretical ramifications of a liquidity trap and the zero lower bound (ZLB), popularized in modern economic research by Krugman,¹⁵ are essential in understanding the new secular stagnation hypothesis. In many modern advanced economies, the natural rate of interest is too low. The secular forces of the aging population and prolonged deflation further push the natural rate of interest down. Central banks must respond to this by lowering the real rate of interest, but sooner or later they will be unable to keep up because of the ZLB. Faced with these challenges, orthodox monetary policy inevitably loses its effectiveness. The only feasible method of lowering the real interest rate in a country experiencing a liquidity trap is to increase inflation, and as the monetary policy of Japan has shown – it is a remarkably difficult challenge.

The active role of the government is a central element of the theory of secular stagnation. In the most prominent model of secular stagnation, Eggertsson, Mehrotra, and Robbins show that the economy will be unable to escape the ZLB without government intervention.¹⁶ And while sufficiently high technological progress might offset forces of secular stagnation,¹⁷ governments must actively work to minimize the adverse effects of those forces. Immigration can successfully lessen secular stagnation, but only if the host country has a sufficiently low unemployment rate, otherwise it exacerbates the symptoms.¹⁸

The most well-known empirical case of secular stagnation is the economy of Japan. Mainly, prolonged stagnation that Japan has been experiencing since the 1990s could very well be the future of Europe.¹⁹ Rawdanowicz, Bouis, Inaba, and Christensen identify eurozone countries as especially vulnerable to secular stagnation.²⁰ Natural rates of interest have reached historical lows.²¹ With conventional monetary policy

C. Teulings, R. Baldwin (eds.), *Secular Stagnation: Facts, Causes, and Cures*, London 2014; L.H. Summers, *Low Equilibrium Real Rates, Financial Crisis, and Secular Stagnation*, in M.N. Baily, J.B. Taylor (eds.), *Across the Great Divide: New Perspectives on the Financial Crisis*, Stanford, CA 2014; L.H. Summers, "Demand Side Secular Stagnation", *American Economic Review*, vol. 105, no. 5 (2015).

¹⁵ P.R. Krugman, "It's Baaack: Japan's Slump and the Return of the Liquidity Trap", *Brookings Papers on Economic Activity*, vol. 1998, no. 2 (1998).

¹⁶ G.B. Eggertsson, N.R. Mehrotra, J.A. Robbins, "A Model of Secular Stagnation: Theory and Quantitative Evaluation", *American Economic Journal: Macroeconomics*, vol. 11, no. 1 (2019).

¹⁷ B. Eichengreen, "The Mayekawa Lecture: Wall of Worries: Reflections on the Secular Stagnation Debate", *Monetary and Economic Studies*, vol. 33, no. 1 (2015); J. Mokyr, *Secular Stagnation? Not in Your Life*, in C. Teulings, R. Baldwin (eds.), *Secular Stagnation...*

¹⁸ K. Miyagiwa, Y. Ono, "Immigration and Secular Stagnation", *ISER Discussion Paper*, no. 1054 (2019).

¹⁹ P.R. Krugman, *Four Observations on Secular Stagnation*, in C. Teulings, R. Baldwin (eds.), *Secular stagnation...* L. H. Summers, *Reflections on the 'New Secular Stagnation...'*; L. H. Summers, "Demand Side Secular Stagnation", *American Economic Review*, vol. 105, no. 5 (2015).

²⁰ L. Rawdanowicz, R. Bouis, K.-I. Inaba, A.K. Christensen, "Secular Stagnation: Evidence and Implications for Economic Policy", *OECD Economics Department Working Papers*, no. 1169 (2014).

²¹ G. Claes, "Low Long-term Rates: Bond Bubble or Symptom of Secular Stagnation?", *Bruegel Policy Contribution*, no. 2016/15 (2016); K. Holston, T. Laubach, J.C. Williams, "Measuring the Natural

losing steam, a 4% inflation target emerged as one of the leading solutions to the ZLB problem.²² Undoubtedly, the loose monetary policy that the European Central Bank (ECB) has conducted in recent years shows that secular stagnation in Europe is being treated as an immediate problem.

Finally, in the context of secular stagnation, the discussion over the independence of central banks and policy coordination came to the forefront of macroeconomic research.²³ Historically, central bank independence is beneficial in combating inflation but has little effect on the real economy.²⁴ In order to stimulate aggregate demand, an expansionary fiscal policy with an increase in public debt becomes a necessity, which causes mounting pressure for monetary-fiscal policy coordination.²⁵

3. SECULAR STAGNATION IN EUROPE

For the empirical analysis, I look at Europe's seven biggest advanced economies according to the 2018 nominal GDP (Germany, United Kingdom, France, Italy, Spain, Netherlands, and Switzerland). Additionally, they are all compared to the economy of Japan to establish a similar characteristic that might indicate the threat of secular stagnation.

All the selected countries have had a low average annual growth rate. Two of them (Italy and Spain) have had economic growth slower than Japan, known for its long economic stagnation. The situation in Italy is especially significant because its negative growth rate is much lower than in other countries. The ones with over 1% average (Switzerland, Germany, the United Kingdom) have relatively healthy economic growth for an advanced economy. With Brexit looming over Europe, the growth rate will most likely dip down in the next couple of years. Inflation in the eurozone states is very similar. The only country with a lower inflation rate than Japan is Switzerland. Both have their central banks and strong demand for their safe-haven national currencies. The United Kingdom has the most optimal inflation rate (closest to the 2% consensus).

Rate of Interest: International Trends and Determinants", *Journal of International Economics*, vol. 108, no. S1 (2017).

²² L.M. Ball, "The Case for Four Percent Inflation", *Central Bank Review*, vol. 13, no. 2 (2013). O.J. Blanchard, G. Dell'Ariccia, P. Mauro, "Rethinking Macroeconomic Policy", *IMF Staff Position Notes*, no. SPN/10/03 (2010); P.R. Krugman, *End this Depression Now!*, New York, NY 2012.

²³ F. Bianchi, L. Melosi, "The Dire Effects of the Lack of Monetary and Fiscal Coordination", *Journal of Monetary Economics*, vol. 104 (2019). G. Corsetti, L. Dedola, M. Jarociński, B. Maćkowiak, S. Schmidt, "Macroeconomic Stabilization, Monetary-fiscal Interactions, and Europe's Monetary Union", *European Journal of Political Economy*, vol. 57 (2019). M. Jarociński, B. Maćkowiak, "Monetary-fiscal Interactions and the Euro Area's Malaise", *Journal of International Economics*, vol. 112 (2018).

²⁴ A. Alesina, L.H. Summers, "Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence", *Journal of Money, Credit and Banking*, vol. 25, no. 2 (1993).

²⁵ L.H. Summers, "Secular Stagnation and Macroeconomic Policy", *IMF Economic Review*, vol. 66, no. 2 (2018).

Table 1. Economic growth and inflation 2009-2018 (% average)

State	GDP growth (constant prices)	Inflation rate (CPI)
France	0.9	1.2
Germany	1.3	1.3
Italy	-0.3	1.3
Netherlands	0.9	1.3
Spain	0.5	1.1
Switzerland	1.5	-0.1
United Kingdom	1.3	2.3
Japan	0.7	0.3

Source: International Monetary Fund, *World Economic Outlook Database*, at <<http://www.imf.org/>>, 31 October 2019.

Table 2. General government debt 2018 (% GDP)

State	General government gross debt	General government net debt
France	99	88
Germany	60	41
Italy	132	120
Netherlands	54	45
Spain	97	84
Switzerland	41	21
United Kingdom	87	78
Japan	237	153

Source: International Monetary Fund, *World Economic Outlook Database*, at <<http://www.imf.org/>>, 31 October 2019.

Japan is by far the most in-debt country when considering the gross debt, but Italy is a close second in the more crucial net debt statistic. Other countries with relatively high net debt are France, Spain, and the United Kingdom. Notably, Germany has low debt compared to other largest European economies. As an increase in public spending is one of the main ways of combating secular stagnation, countries with massive debt are at a significant disadvantage. Countries within the eurozone with high public debt, like Italy, have limited options for employing monetary policy to alleviate their fiscal problems. Monetary financing could provide a powerful instrument for fostering economic stability.

Table 3. Aging population, selected years

State	Persons 65 and older (% of population)			Fertility rate		
	1977	1997	2017	1977	1997	2017
France	13.7	15.4	19.5	1.86	1.73	1.86
Germany	15.3	15.7	21.3	1.51	1.37	1.57
Italy	12.5	17.4	22.4	1.97	1.23	1.32
Netherlands	11.1	13.4	18.7	1.58	1.56	1.62
Spain	10.9	15.8	19.1	2.67	1.18	1.31
Switzerland	13.2	15.0	18.2	1.53	1.48	1.52
United Kingdom	14.4	15.9	18.2	1.69	1.72	1.74
Japan	8.4	15.7	27.7	1.80	1.39	1.43

Source: Organisation for Economic Co-operation and Development, *OECD Data*, at <<http://data.oecd.org/>>; Organisation for Economic Co-operation and Development, *OECD.Stat*, at <<http://stats.oecd.org/>>, 31 October 2019.

Every single one of the selected states experiences aging of its population. However, the severity of the process is much more pronounced in a few cases. The most extreme example is, of course, Japan, where the share of population 65 and older has increased from 8.4% in 1977 to 27.7% in 2017. The oldest societies, according to this statistic, are the Italians and Germans, with others trailing not that far behind. Significantly, Spain has almost doubled the percentage of population 65 and older. However, the most striking statistic is the decline in the fertility rate of Spain and Italy, with both countries placing lower than Germany, Switzerland, or even Japan.

Table 4. Unemployment rate, selected years (%)

State	Unemployment rate		
	2000	2009	2018
France	9.2	9.1	9.1
Germany	8.0	7.7	3.4
Italy	10.1	7.7	10.6
Netherlands	3.7	4.4	3.8
Spain	13.9	17.9	15.3
Switzerland	1.8	3.7	2.6
United Kingdom	5.5	7.6	4.1
Japan	4.7	5.1	2.4

Source: International Monetary Fund, *World Economic Outlook Database*, at <<http://www.imf.org/>>, 31 October 2019.

While a country in secular stagnation should logically have a low unemployment rate, it seems plausible that negative forces of economic stagnation could prove to have a stronger influence on the job market than the process of aging. High unemployment is also in line with Hansen's original theory.²⁶ The data contrasts countries with very high unemployment (Spain), moderate unemployment (Italy and France) and low unemployment (others). It should be somewhat alarming that Italy and Spain have such high unemployment rates with the lowest fertility rates of presented countries, and how much older these societies have gotten in the last few decades.

One of the main issues in any empirical analysis of secular stagnation is the measurement of the natural rate of interest. Any such measurements rely heavily on used econometric models, and there can be significant differences between the results of different authors. Nevertheless, the changes (most likely a decline) in the natural rate of interest provide essential insights into a country's economy, even if the actual value is not precisely observable. The most influential modern paper on the topic is Laubach and Williams,²⁷ recently updated in Holston, Laubach, and Williams.²⁸ Table 5 presents the natural rate of interest in selected countries.²⁹ The data is from the most recent available year.

Table 5. Natural rate of interest

State	Natural rate of interest
France	around 0.5% (Brand, Bielecki, & Penalver, 2018); negative, close to 0% (Fries, Mésonnier, Mouabbi, & Renne, 2018)
Germany	between 0.5% and 1.5% (Brand, Bielecki, & Penalver, 2018); around 1% (Bystrov, 2018); negative, close to 0% (Fries, Mésonnier, Mouabbi, & Renne, 2018)
Italy	around -0.3% (Brand, Bielecki, & Penalver, 2018); negative (Bystrov, 2018); negative, close to 0% (Fries, Mésonnier, Mouabbi, & Renne, 2018)
Japan	-1% (Han, 2019); 0.3% (Okazaki & Sudo, 2018)
Netherlands	between 0.5% and 1.5% (Brand, Bielecki, & Penalver, 2018)
Spain	between 0.5% and 1.5% (Brand, Bielecki, & Penalver, 2018); negative, close to 0% (Fries, Mésonnier, Mouabbi, & Renne, 2018)
Switzerland	...
United Kingdom	around 1.5% (Holston, Laubach, & Williams, 2017)

Source: Own preparation.

²⁶ A.H. Hansen, "Economic Progress and Declining Population Growth", *American Economic Review*, vol. 29, no. 1 (1939).

²⁷ T. Laubach, J.C. Williams, "Measuring the Natural Rate of Interest", *Review of Economics and Statistics*, vol. 85, no. 4 (2003).

²⁸ K. Holston, T. Laubach, J.C. Williams, "Measuring the Natural Rate...."

²⁹ There is no data available for Switzerland.

All the countries have experienced a significant decline in the natural rate of interest over the years. Right now, the R^* is close to zero. Again, the exact number is less important than the visible drop over the decades. The United Kingdom appears to be in a slightly better position than the eurozone countries and Japan. Italy is again the country where the situation is the worst – it is the only one where every study identifies a negative natural rate of interest. Inflation in eurozone countries is virtually identical, which further complicates possible monetary policy solutions for Italy.

Italy and, to a lesser degree, Spain and Germany, are the countries most vulnerable to secular stagnation. European economies, in general, are under tremendous pressure with the Brexit turmoil and potential full-blown economic crisis in Italy.

The secular stagnation forces that Italy and Spain are facing are similar, but the economic situation of Italy is worse. Both countries face double-digit unemployment with a rapidly aging population, high public debt, and very low economic growth. The economic crisis in Italy is dangerous to the entire European Union. Unlike Japan, Italy has severe systemic unemployment and limited control over its central bank. In recent years, the Bank of Japan has basically engaged in monetary-fiscal policy coordination – a solution that does not apply to European countries.

On the other hand, Germany is vulnerable to secular stagnation by virtue of being the economy most similar to Japan. It has been one of the most developed countries in the world for many years – the arrival of secular stagnation is less likely to cause deep collapse than to steady the output until the next technological revolution. Germany's importance for the global economy and the European Union makes a period of prolonged depression very harmful to the entire region. However, its growth has been relatively strong for the past few years.

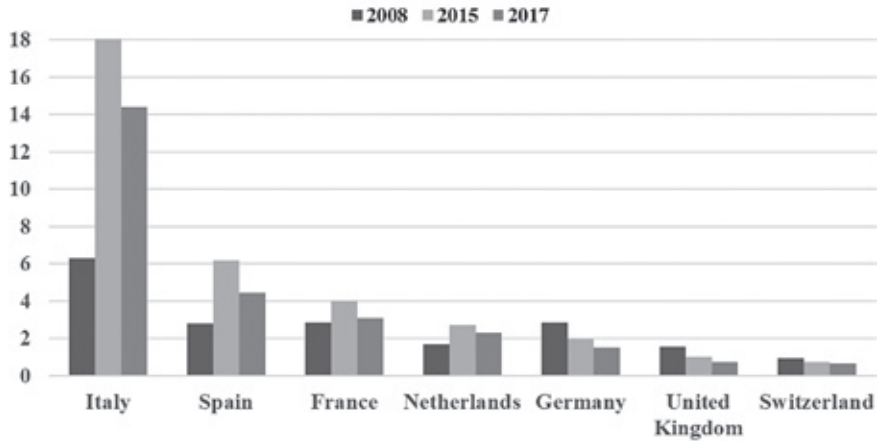
Finally, one has to consider financial sector stability when talking about economic stagnation and potential crises. Italy's banks were hit hard during the Great Recession. The world's oldest bank Monte dei Paschi di Siena famously had to be bailed out. The current situation of the banking sectors of selected countries is strikingly diverse. Graph 1 shows the ratio of nonperforming loans in 2008 (global financial crisis), 2015 (when the situation in Italy was the worst), and 2017 (most recent data).³⁰

In 2017, the ratio of nonperforming loans to total loans is still the highest in Italy (14.4%) by far, followed by Spain (4.5%) and France (3.1%). The lowest ratios are in Germany (1.5%), the United Kingdom (0.7%), and Switzerland (0.6%). The ratios in Italy and Spain deteriorated the most as a result of the crisis. When compared to 2015, in 2017 there was an improvement in every single one of the analyzed countries. This data helps to illustrate the difficulty that the ECB faces in conducting monetary policy in a single-currency area. With recent growing division inside the ECB over further policy easing,³¹ it is essential to closely monitor how its new President Christine Lagarde will handle the situation in Italy.

³⁰ There is no data available for Japan.

³¹ See: M. Arnold, *Draghi Faces Chorus of Criticism over Fresh Stimulus*, The Financial Times, 20 October 2019. M. Arnold, *Weidmann Warns He Will Oppose Expanded ECB Bond Buying*, The Financial

Graph 1. Bank nonperforming loans (% of total loans)



Source: The World Bank, *Data*, at <<https://data.worldbank.org/>>, 2 November 2019.

4. POLICY RECOMMENDATIONS

The most straightforward course of action in combating secular stagnation is an increase in aggregate demand. Fiscal policy can stimulate the economy through sizeable public spending, inclusive social programs, and combating economic inequality. The United States has overcome the post-2009 stagnation with help from its natural resilience, the strength of its central bank, President Obama's fiscal stimulus, and a strong influx of immigrants. And while those solutions are obviously not universal, their implications are worth considering as a remedy for Europe's struggles.

The current monetary policy of the ECB is expansionary, and it is difficult to predict how it could become even more expansionary when the need arises. Quantitative and qualitative monetary easing (QQE) used to combat deflation and too-low inflation, along with negative rates, have had limited success. As a result, any future global economic crisis might have devastating consequences for Europe, even with macroprudential measures in full effect. A 4% inflation target could give central banks room for orthodox policy maneuvers during the upcoming recession. One immediate danger of further QQE is the emergence of speculative bubbles in financial markets, yet at the time, there is no reasonable alternative. Other potential risks often associated with QQE include an excessive central bank's balance sheet and a threat of double-digit inflation. Future economic research should focus on the theoretical refinement and the

Times, at <<https://www.ft.com/>>, 20 October 2019. P. Skolimowski, *ECB Dispute Goes Public as Governors Spar over Draghi's QE Move*, Bloomberg, at <<https://www.bloomberg.com/>>, 20 October 2019.

development of the safeguards that would lessen the potential negative effects of improperly conducted QQE policies.

A potential solution to both stagnant economies and ballooning public debt is monetary and fiscal policy coordination. Monetary financing, not that long ago considered a short-sighted monetary fallacy, is becoming increasingly acceptable in advanced economies. The central bank and the ministry of finance of Japan have, to some extent, already implemented such solutions. Of course, the ECB prohibits monetary financing and excessive government deficits in eurozone countries.³² The question remains whether central bank independence is a realistic concept in the secular stagnation bound future where orthodox monetary policy is ineffective and perpetual QQE is the new normal.

In addition to workforce shortage, aging societies face an uncertain future of their pension systems. One possible solution, the loosening of the immigration policy of the European Union, remains a hot button issue. For countries like Germany, an obvious answer to the labor shortage is an influx of immigrants. But the double-digit unemployment countries like Italy and Spain clearly have structural problems that immigration is unlikely to fix. Policymakers must account for these differences, yet any solutions must be in line with the spirit of the European Union. Some combination of pro-population growth programs and an influx of foreigners is the most realistic solution.

5. SUMMARY

The secular stagnation hypothesis is more relevant than ever for advanced European economies. The Japanese economy has proved the existence of secular stagnation. However, the United States' economy has shown twice now that secular stagnation is not inevitable. With secular stagnation on the horizon, European economies face an uncertain future. Right now, monetary and fiscal policies have limited tools for lifting the economy out of a potential economic crisis. Secular stagnation remains a grave threat.

Out of selected countries, Italy, and to a lesser degree, Spain and Germany are the most vulnerable to secular stagnation. The worrying demographic trends will be difficult to reverse. Inflation and natural rates in the eurozone remain low, which is troubling for monetary policy. On the other hand, the unemployment rate varies greatly. A potential global economic crisis might have devastating consequences for the region, which underlines the need for immediate policy changes. The need for monetary and fiscal policy coordination is likely to become the key point of future discussions.

³² See: European Central Bank, *Fiscal Policies*, at <<https://www.ecb.europa.eu/mopo/eaec/fiscal/html/index.en.html>>, 27 August 2019.

BIBLIOGRAPHY

- Alesina A., Summers L.H., "Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence", *Journal of Money, Credit and Banking*, vol. 25, no. 2 (1993).
- Arnold M., *Draghi Faces Chorus of Criticism over Fresh Stimulus*, The Financial Times, <https://doi.org/10.2307/2077833>.
- Arnold M., *Weidmann Warns He Will Oppose Expanded ECB Bond Buying*, The Financial Times, at <<https://www.ft.com/>>.
- Ball L.M., "The Case for Four Percent Inflation", *Central Bank Review*, vol. 13, no. 2, (2013).
- Bianchi F., Melosi L., "The Dire Effects of the Lack of Monetary and Fiscal Coordination", *Journal of Monetary Economics*, vol. 104 (2019), <https://doi.org/10.1016/j.jmoneco.2018.09.001>.
- Blanchard O.J., Dell'Ariccia G., Mauro P., "Rethinking Macroeconomic Policy", *IMF Staff Position Notes*, no. SPN/10/03 (2010), <https://doi.org/10.5089/9781455224982.004.A001>.
- Brand C., Bielecki M., Penalver A., "The Natural Rate of Interest: Estimates, Drivers, and Challenges to Monetary Policy", *ECB Occasional Paper Series*, no. 217 (2018).
- Burns A.F., *Economic Research and the Keynesian Thinking of Our Times*, New York, NY 1946.
- Bystrov V., "Measuring the Natural Rates of Interest in Germany and Italy", *Lodz Economics Working Papers*, no. 7/2018 (2018).
- Claeys G., "Low Long-term Rates: Bond Bubble or Symptom of Secular Stagnation?", *Bruegel Policy Contribution*, no. 2016/15 (2016).
- Corsetti G., Dedola L., Jarociński M., Maćkowiak B., Schmidt S., "Macroeconomic Stabilization, Monetary-fiscal Interactions, and Europe's Monetary Union", *European Journal of Political Economy*, vol. 57 (2019), <https://doi.org/10.1016/j.ejpoleco.2018.07.001>.
- Eggertsson G.B., Mehrotra N.R., Robbins J.A., "A Model of Secular Stagnation: Theory and Quantitative Evaluation", *American Economic Journal: Macroeconomics*, vol. 11, no. 1 (2019), <https://doi.org/10.1257/mac.20170367>.
- Eichengreen B., "The Mayekawa Lecture: Wall of Worries: Reflections on the Secular Stagnation Debate", *Monetary and Economic Studies*, vol. 33, no. 1 (2015).
- European Central Bank, *Fiscal Policies*, at <<https://www.ecb.europa.eu/mopo/eac/fiscal/html/index.en.html>>.
- Fries S., Mésonnier J.S., Mouabbi S., Renne J.P., "National Natural Rates of Interest and the Single Monetary Policy in the Euro Area", *Journal of Applied Econometrics*, vol. 33, no. 6, (2018), <https://doi.org/10.1002/jae.2637>.
- Hamberg D., "Income Growth in Secular Stagnation and Inflation", *The Economic Journal*, vol. 63, no. 251 (1953), <https://doi.org/10.1002/jae.2637>.
- Han F., "Demographics and the Natural Rate of Interest in Japan", *IMF Working Paper*, no. WP/19/31 (2019), <https://doi.org/10.5089/9781484396230.001>.
- Hansen A.H., "Economic Progress and Declining Population Growth", *American Economic Review*, vol. 29, no. 1 (1939).
- Hansen A.H., *Fiscal Policy and Business Cycles*, New York, NY 1941.
- Higgins B., "The Concept of Secular Stagnation", *American Economic Review*, vol. 40, no. 1 (1950).

- Holston K., Laubach T., Williams J.C., "Measuring the Natural Rate of Interest: International Trends and Determinants", *Journal of International Economics*, vol. 108, no. S1 (2017), <https://doi.org/10.1016/j.jinteco.2017.01.004>.
- International Monetary Fund, *World Economic Outlook Database*, <http://www.imf.org/>.
- Jarociński M., Maćkowiak B., "Monetary-fiscal Interactions and the Euro Area's Malaise", *Journal of International Economics*, vol. 112 (2018), <https://doi.org/10.1016/j.jinteco.2017.12.006>.
- Keirstead B.S., *The Theory of Economic Change*, Toronto 1948.
- Krugman P.R., "It's Baaack: Japan's Slump and the Return of the Liquidity Trap", *Brookings Papers on Economic Activity*, vol. 1998, no. 2 (1998), <https://doi.org/10.2307/2534694>.
- Krugman P.R., *End this Depression Now!*, New York, NY 2012.
- Krugman P.R., *Four Observations on Secular Stagnation*, in C. Teulings, R. Baldwin (eds.), *Secular Stagnation: Facts, Causes, and Cures*, London 2014.
- Laubach T., Williams J.C., "Measuring the Natural Rate of Interest", *Review of Economics and Statistics*, vol. 85, no. 4 (2003), <https://doi.org/10.1162/003465303772815934>.
- Mankiw G.N., "The Reincarnation of Keynesian Economics", *NBER Working Paper Series*, no. 3885 (1991), <https://doi.org/10.3386/w3885>.
- Miyagiwa K., Ono Y., "Immigration and Secular Stagnation", *ISER Discussion Paper*, no. 1054 (2019), <https://doi.org/10.2139/ssrn.3387136>.
- Mokyr J., *Secular Stagnation? Not in Your Life*, in C. Teulings, R. Baldwin (eds.), *Secular Stagnation: Facts, Causes, and Cures*, London 2014.
- Niehans J., "Economic Growth with Two Endogenous Factors", *The Quarterly Journal of Economics*, vol. 77, no. 3 (1963), <https://doi.org/10.2307/1879567>.
- Okazaki Y., Sudo N., "Natural Rate of Interest in Japan – Measuring Its Size and Identifying Drivers Based on a DSGE model", *Bank of Japan Working Paper Series*, no. 18E6 (2018).
- Organisation for Economic Co-operation and Development, *OECD Data*, at <<http://data.oecd.org/>>.
- Organisation for Economic Co-operation and Development, *OECD.Stat*, at <<http://stats.oecd.org/>>.
- Rawdanowicz Ł., Bouis R., Inaba K.-I., Christensen A.K., "Secular Stagnation: Evidence and Implications for Economic Policy", *OECD Economics Department Working Papers*, no. 1169 (2014), <https://doi.org/10.1787/5jxvvg6q27vd-en>.
- Rothbard M.N., "Breaking out of the Walrasian Box: The Cases of Schumpeter and Hansen", *The Review of Austrian Economics*, vol. 1, no. 1 (1987), <https://doi.org/10.1007/BF01539335>.
- Samuelson P., "Lord Keynes and the General Theory", *Econometrica*, vol. 14, no. 3 (1946), <https://doi.org/10.2307/1905770>.
- Simons H., "Hansen on Fiscal Policy", *Journal of Political Economy*, vol. 50, no. 2 (1942), <https://doi.org/10.1086/255852>.
- Skolimowski P. *ECB Dispute Goes Public as Governors Spar over Draghi's QE Move*, Bloomberg, at <<https://www.bloomberg.com/>>.
- Summers L.H., "US Economic Prospects: Secular Stagnation, Hysteresis, and the Zero Lower Bound", *Business Economics*, vol. 49, no. 2 (2014), <https://doi.org/10.1057/be.2014.13>.

- Summers L.H., *Reflections on the 'New Secular Stagnation Hypothesis'* in C. Teulings, R. Baldwin (eds.), *Secular Stagnation: Facts, Causes, and Cures*, London 2014.
- Summers L.H., *Low Equilibrium Real Rates, Financial Crisis, and Secular Stagnation*, in M.N. Baily J.B. Taylor (eds.), *Across the Great Divide: New Perspectives on the Financial Crisis*, Stanford, CA 2014.
- Summers L.H., "Demand Side Secular Stagnation", *American Economic Review*, vol. 105, no. 5 (2015), <https://doi.org/10.1257/aer.p20151103>.
- Summers L.H., "Secular Stagnation and Macroeconomic Policy", *IMF Economic Review*, vol. 66, no. 2 (2018), <https://doi.org/10.1057/s41308-018-0056-6>.
- Terborgh G. "Dr. Hansen on 'The Bogey of Economic Maturity'", *The Review of Economics and Statistics*, vol. 28, no. 3 (1946), <https://doi.org/10.2307/1926426>.
- The World Bank, *Data*, at <<https://data.worldbank.org/>>.

Artur F. TOMECZEK – is an Assistant Professor at the Global Economic Interdependence Department of the World Economy Research Institute, SGH Warsaw School of Economics. He holds a PhD in economics (2019) and an MA in international economics (2013) from the University of Economics in Katowice. He specializes in macroeconomics and international economics. Previous research topics include economic growth, economic history, institutions, international trade, international relations, business networks, secular stagnation, the economic situation in the European Union, and the economy of Japan.