COEU Study Guide

The European Debt Crisis

PREPMUN 2022

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Welcome Letter

Dear esteemed delegates,

A warm welcome to the distinguished Council of the European Union! We are deeply honoured to be your chairs for PREPMUN 2022 and look forward to seeing you at the conference.

The world we live in today is fraught with various economic issues, geopolitical tensions and social concerns. Many of the issues that we are experiencing now can be paralleled to historical events. History gives us a glimpse into how former world leaders came together to tackle problems through negotiations and cooperation. It serves as a reminder for us that in overcoming challenges that plague our world -- regardless of nature -- can be solved through multilateralism and involvement of international bodies.

In the Council of the European Union, the European Debt Crisis -- a major turning point of the European Union's history with ramifications that continue to be seen today -- will be scrutinised and heavily discussed by delegates. As the world's largest trading bloc with the potential to drastically shape the global economy, the Council of the European Union is faced with an insurmountable task of cooperating regionally to tackle the crisis while mitigating domestic events. With the involvement of international bodies and unique mechanics involving personal directives and news updates, this Council will unquestionably be an invigorating discussion involving disparate perspectives and unexpected circumstances.

Our chairs of the Council of the European Union look forward to witnessing all delegates' active participation in chartering the European Union's past, present and future direction. With the slew of issues that the Council of the European Union will encounter and the ever-present inter-state tensions, your experience in this committee will truly be dynamic.

The Dais of the Council of the European Union
Model United National Preparatory Conference 2022

Chair Introductions

Janice Goh

When Janice isn't trying to wrap her head around the H2 Econs or taking 30 minute naps that turn into three-hour sleep, she enjoys bringing a smile to her friends' faces by making — or attempting to make — hilarious jokes and puns. All jokes aside (literally), Janice enjoys reading up on current affairs and knowing more about the complicated and complex world that we live in. In this year's iteration of PREPMUN, Janice hopes to be able to create a fun, fulfilling and enriching experience for all delegates.

Timothy Chia

A Year 6 student studying in Hwa Chong, Timothy has attempted to leave the MUN circuit on no more than 3 occasions since joining it in 2018, only to be dragged back (almost unwillingly) by the allure of MUNs. This time, he is determined to make PREPMUN 2022 his last conference — for real this time. That being said, as he chairs his final conference, Timothy hopes that all Delegates will enjoy a fruitful and stimulating debate in EUCO. He looks forward to seeing you all at PREPMUN 2022!

Wu Yuxuan

Yuxuan, a Secondary 3 Rafflesian, prides himself on his extreme lack of sleep and his (still growing) pile of overdue homework. You may occasionally see him gaming when he isn't drowning in his overflowing to-do list. He also enjoys investing, MUNs and lofi music. He largely enjoys the enriching debate that MUNs provide. Despite it being his first time chairing, Yuxuan awaits an exciting discussion, and that delegates will go all in on the exciting topics prepared.

Council Introduction

The first of its kind, the European Union (EU) is the world's largest trading bloc and third largest economy in the world. The bloc's economic affairs and policies have the potential to shape the world economy — for better, and for worse. The Council of the European Union is one of the seven principal institutions of the European Union and is tasked with legislating and coordinating EU laws and policy.

Set in the context of the 2009 European Debt Crisis, the Council of the European Union must navigate the complexities of a rapidly worsening Balance-of-Payment crisis in Greece while managing the ripple effects of the crisis in other European economies. As the crisis escalates, a future where the Euro collapses and the European project fails grows ever more likely.

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The Issue of the Eurozone Debt Crisis

The European Debt Crisis

The European Debt Crisis was a Balance-of-Payments crisis precipitated by irresponsible lending practices and the discovery of underreported debt within the EU. The Balance-of-Payments crisis was due to the stoppage of capital inflow, worsened by inability to devalue currency. Its impacts reverberated throughout Europe and beyond, with governments reporting widespread capital flight, a rise in unemployment and social unrest.

Internal Factors Leading to the European Debt Crisis

Regulation of Credit Rating Agencies: Greek's Misreporting

Following the inauguration of Greece's new Prime Minister George Papandreou, the new administration revealed that its government spending has been falsified and underreported. Most notably, the initial prediction of the 2009 deficit was at 3.7%, but later revealed to be 12.5% of Greece's gross domestic product.[1]

News of under-reporting of the deficit led to the downgrade of Greece's credit rating from 'A-' to 'BBB+' – the lowest credit rating that Greece received in ten years as it signalled the diminished trustworthiness of Greece's financial institutions.[2] As a result, the loss in investors' confidence aroused concerns on Greece's debt and increased risk of defaulting on debt.[3] This led to propositions to raise the interest rate of holding onto government bonds, such that investors can buffer the risk of holding the Greek government bonds. The absence of regulation over credit rating agencies that led to Greece's misreporting of statistics set in place the domino effect of lower investor confidence and aversion to risk, thus causing the Eurozone Debt Crisis while minimising the solutions that can be undertaken.

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[1] "Greece Condemned for Falsifying Data." Financial Times. Accessed November 2, 2022. https://www.ft.com/content/33b0a48c-ff7e-11de-8f53-00144feabdc0.

[2] Zaidi, Deena, 909 112th Avenue, Y. Bayar, P. Bolton, V. Bozic and C. Magazzino, R. Brooks et al., Et Al., et al. "Eurozone Debt Crisis and Regulation of Credit Rating Agencies." Global Credit Review. Accessed November 2, 2022. https://www.worldscientific.com/doi/10.1142/S2010493615500087.

[3] "Debt Management Evaluation through Support Vector Machines: On the ..." ResearchGate. Accessed November 2, 2022. https://www.researchgate.net/publication/340038362_Debt_management_evaluation_through_Support_Vector_Machines_on_the_example_of_Italy_and_Greece.

Lowered cost of borrowing

Prior to the European Debt Crisis, the common nominal interest rate was adopted by Eurozone countries and determined by the European Central Bank.[4] However, the differing inflation rate levels resulted in varying real interest rate levels[5]. This incentivised borrowing by the South European member states from North Europe, which has lower real interest rate and cost of borrowing,[6] resulting in debt accumulation and current account balances deficit in the borrowing Southern Countries.[7] Southern European countries like Greece and Portugal experienced worsening of their current account at -11.1% and -10.5% respectively.[8]

Crucially, the borrowing by the PIIGS (Portugal, Italy, Ireland, Greece and Spain) nations violated Protocol 13,[9] Article 1 listed in the Treaties of the European Union on the convergence criteria is defined as:

"The criterion on price stability referred to in the first indent of Article 140(1) of the Treaty on the Functioning of the European Union shall mean that a Member State has a price performance that is sustainable and an average rate of inflation, observed over a period of one year before the examination, that does not exceed by more than 1 ½ percentage points that of, at most, the three best performing Member States in terms of price stability. Inflation shall be measured by means of the consumer price index on a comparable basis taking into account differences in national definitions."[10]

The current account imbalances due to the inflow of capital from higher-income countries to lower-income countries also led to the lack of focus on adjustment shocks. The accumulation of debt and current account deficit made it difficult for countries to implement policies, specifically fiscal policies that involve running a budget deficit, to buffer economic shocks. Furthermore, the

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[4] "Toda-Yamamoto Causality Test between Inflation and Nominal Interest ..." ResearchGate . Accessed November 2, 2022. https://www.researchgate.net/profile/Chaido-Dritsaki/publication/321715623_Toda-Yamamoto_Causality_Test_between_Inflation_and_Nominal_Interest_Rates_Evidence_from_Three_Countries_of_Europe/links/5a2d646845851552ae7ee427/Toda-Yamamoto-Causality-Test-between-Inflation-and-Nominal-Interest-Rates-Evidence-from-Three-Countries-of-Europe.pdf?origin=publication_detail.

[5] ie. interest rate that has been subtracted to exclude the effects of inflation

[6] "Understanding the Political Economy of the Eurozone Crisis." Annual Review of Political Science. Accessed November 2, 2022. https://www.annualreviews.org/doi/10.1146/annurev-polisci-051215-023101.

[7] *Ibid*

[8] "The European Sovereign Debt Crisis." American Economic Association . Accessed November 2, 2022. https://pubs.aeaweb.org/doi/pdf/10.1257/jep.26.3.49.

[9] "European Economy 2011." European Economy 2011 . European Commission , November 5, 2011. https://ec.europa.eu/economy_finance/publications/european_economy/2011/.

[10] "Consolidated Protocols, Annexes and Declarations Attached to the Treaties of the European Union/Protocols." Wikisource . Accessed November 2, 2022. https://en.wikisource.org/wiki/Consolidated_protocols,_annexes_and_declarations_attached_to_the_treaties_of_the_European_Union/Protocols#PROTOCOL_(No_12)_ON_THE_EXCESSIVE_DEFICIT_PROCEDURE.

susceptibility of the countries towards sudden reversals of large capital flow reserves (in terms of "hot money") further heightened the risk exposed to countries insofar as bursting the property bubbles.[11]

The asymmetric economic and societal development between the Northern and Southern member states,[12] [13] as well as a rise in demand for products in general that failed to be counteracted with an equal steady supply of those products,[14] [15] made the lower-income Southern member states vulnerable to external shocks.

This the formation of the PIIGS countries — Portugal, Italy, Ireland, Greece and Spain — that became notorious for their vulnerable economic status during the European Debt Crisis.[16]

Fragmented Financial Regulations

Coupled with the lowering of interest rates, the European Central Bank's easing of credit conditions further lowered the cost of borrowing and barriers towards borrowing funds to spur consumption and investment.[17] While this had boosted the economic development of Eurozone countries by stimulating their aggregate demand, increased lending also led to the formation of property bubbles in Portugal, Ireland and Spain.[18]

With increased lending to both the private and public sector borrowers who lacked the means to repay their loans with interest, financial institutions faced a greater risk of defaulted payments. This, in turn, paved the way for the absence of financial buffers against bad credit, weakening the capacity of European financial institutions to mitigate the sovereign debt crisis.

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[11] Lane, Philip R. "The European Sovereign Debt Crisis." Journal of Economic Perspectives. Accessed November 2, 2022. https://www.aeaweb.org/articles?id=10.1257%2Fjep.26.3.49.

[12] Ie. Migration,mass immigration etc.

[13] "Ethnic Segregation and the Housing Market in Two Cities in Northern and ..." ResearchGate . Accessed November 2, 2022. https://www.researchgate.net/publication/43323555_Ethnic_Segregation_and_the_Housing_Market_in_Two_Cities_in_Northern_and_Southern_Europe_The_Cases_of_Amsterdam_and_Barcelona.

[14] Arango, Joaquin, and Martin Baldwin-Edwards. "Immigrants and the Informal Economy in Southern Europe (2014 Edition)." Taylor & Francis Group, January 1, 1970. https://openlibrary.org/books/OL38719827M/Immigrants_and_the_Informal_Economy_in_Southern_Europe.

[15] Hoffmann, Winfried. "PV Solar Electricity Industry: Market Growth and Perspective." Solar Energy Materials and Solar Cells. North-Holland, September 1, 2006. https://www.sciencedirect.com/science/article/pii/S0927024806002509.

[16] Zhorayev, Olzhas. "The Eurozone Debt Crisis: Causes and Policy Recommendations." Munich Personal RePEc Archive, March 23, 2021. https://www.academia.edu/45512594/The_Eurozone_Debt_Crisis_Causes_and_Policy_Recommendations.

[17] Heider, Florian, and Marie Hoerova. "Interbank Lending, Credit Risk Premia and Collateral." SSRN, December 8, 2009. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1520393.

[18] Ruščáková, Anna, and Jozefína Semančíková. "The European Debt Crisis: A Brief Discussion of Its Causes and Possible Solutions." Procedia - Social and Behavioral Sciences. Elsevier, June 7, 2016. https://www.sciencedirect.com/science/article/pii/S1877042816306152?via%3Dihub.

Systemic Flaws of the Euro Area: Structural rigidity of a Common Monetary Policy

The establishment of the European Monetary Union (EMU) and the Euro Area resulted in the adoption of a centralised monetary policy. In turn, countries in the EMU adopt the Euro as its currency and share a common interest rate. Essentially, monetary policies are centralised and determined by the European Central Bank (ECB), while leaving the fiscal policies to be decentralised and determined by the respective states.[19]

While the common monetary policy is beneficial in promoting intra- and inter-regional trade, it is inherently and structurally flawed on two folds – a sole dependence on fiscal policies, and a lack of customisation to an individual country's circumstances.[20] On the former, reliance on fiscal policies became increasingly paramount in countercyclical macroeconomic policies, given an individual country's inability to unilaterally alter her exchange rate or interest rate.[21] This is inherently problematic in limiting the options available for any Eurozone country to ameliorate any adverse economic effects, thereby constraining the capacity for her economy to bounce back.

Furthermore, the rigidity of the European monetary policy, whereby the interest rates are set by the ECB, becomes challenging as different states, regions and groups experience varying levels of economic development, inflation rate and growth models.[22] The historically low interest rate in the years leading up to the Eurozone Debt Crisis interacted with the disparate domestic conditions to further reinforce and exacerbate the intra-regional capital flow – especially short-term financial assets – from the wealthier Northern European countries to their poorer Southern counterparts, paving the way for a self-fulfilling sovereign debt crisis.[23]

Systemic Flaws of the Euro: Lack of Crisis Mechanisms

Despite the creation of a monetary union and the implementation of the SGP, it remained politically unfeasible to institute a fiscal union of the EU. To address concerns of fiscal independence,[24] the Treaty on the Functioning of the European Union (not to be confused with the Maastricht Treaty) provided for what became known as the "no bail-out clause" in Article 125. Bailouts are typically

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[19] "ABC De L'économie." Banque de France. Accessed November 2, 2022. https://abc-economie.banque-france.fr/.

[20] ie. Trade relations, location, natural resources, etc.

[21] Lane, Philip R. "The European Sovereign Debt Crisis." Journal of Economic Perspectives. Accessed November 2, 2022. https://pubs.aeaweb.org/doi/10.1257/jep.26.3.49.

[22] "Understanding the Political Economy of the Eurozone Crisis." Annual Review of Political Science . Accessed November 2, 2022. https://www.annualreviews.org/doi/10.1146/annurev-polisci-051215-023101.

[23] "Greece Condemned for Falsifying Data." Financial Times. Financial Times. Accessed November 2, 2022. https://www.ft.com/content/33b0a48c-ff7e-11de-8f53-00144feabdc0.

[24] "'Maastricht and the Crisis in Europe: Where We've Been and What We've Learned," by Reza Moghadam, Director, European Department, IMF." International Monetary Fund, February 12, 2014. https://www.imf.org/en/News/Articles/2015/09/28/04/53/sp021214.

considered necessary injections into a country's economy to prevent it from defaulting on its government debt.

Under the no bail-out clause, the EU and member states were unable to "assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of another Member State".[25] This meant that the responsibility for a member state's public debt remained a national rather than EU responsibility. This prevented the danger of moral hazard where the consequences of a country's excessive spending would have to be borne by other member states and created an incentive for countries to conduct prudent fiscal policy. However, this also meant that during times of economic crisis, the European Union had few mechanisms as well as unwillingness to support its economically weaker states and the currency union.[26]

[25] "Lex - 12012E/TXT - En - EUR-Lex." EUR. Accessed November 2, 2022. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12012E%2FTXT.

[26] "The Eurozone (Debt) Crisis – Causes and Crisis Response." RaboResearch - Economic Research. Accessed November 2, 2022. https://economics.rabobank.com/publications/2015/december/the-eurozone-debt-crisis--causes-and-crisis-response.

External Factors Leading to the European Debt Crisis

Concurrent to the internal circumstances of the EU in the leadup to the Eurozone Debt Crisis, the global financial outlook created the conditions that worsened the circumstances of the Eurozone countries. The external factors leading to the Eurozone Debt Crisis set the context of countries' inability to respond effectively and avoid an economic downturn.

Irish Property Bubble (2000–2007)

The Irish Property Bubble was caused by the speculative rising of long-term real estate prices. Between 1991–2001, Ireland witnessed a massive economic boom as their GDP skyrocketed and workforce grew, resulting in a GNP well above the EU's average GNP.

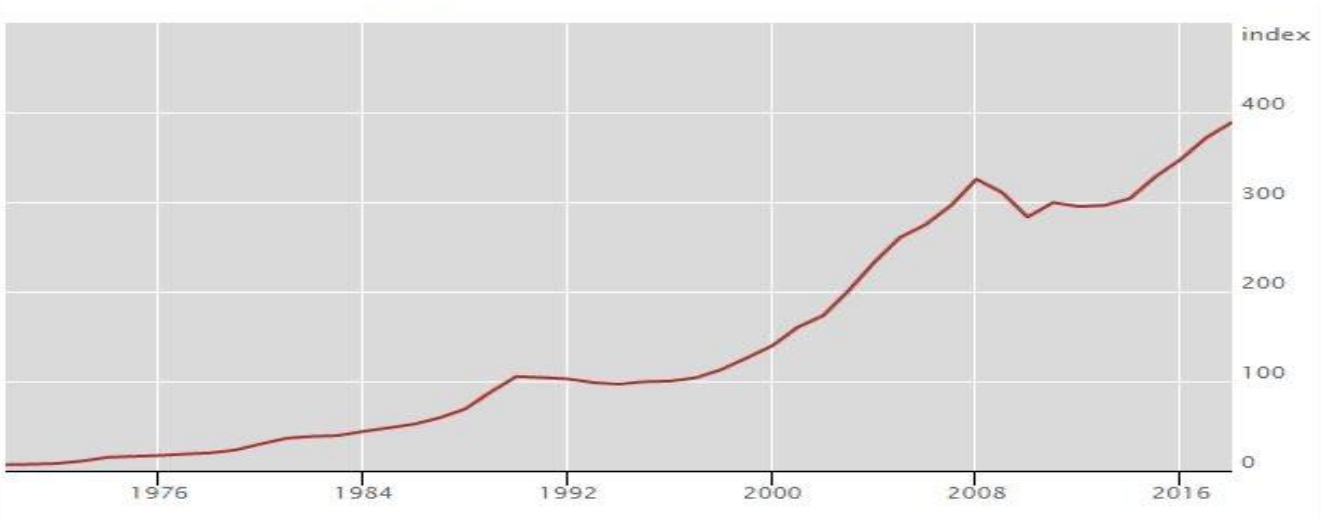

Figure 1: Irish Housing Prices (pre 1976 till post 2016)[27]

With economic growth came an equal boom in banks' lending towards households. With easier credit conditions, more funds became available to more households, incentivising speculation in real estate. The increase in speculation caused Ireland's housing prices to rise by 17% from 2000 to 2001.

In August 2000, the International Monetary Fund (IMF) released a report on Ireland's financial situation, stating that "no industrial country in the last 20 years had experienced price increases on the scale of Ireland without suffering a subsequent fall".[28] The IMF predicted that Ireland would soon

[27] Hennigan, Michael. "Irish Real House Prices up 175% in 50 Years, UK +405%, Germany -1%." Finfacts Ireland, January 1, 1970. https://www.finfacts-blog.com/2018/07/irish-real-house-prices-up-175-in-50.html?m=1.

[28] "Ireland: Selected Issues and Statistical Appendix." IMF. Accessed November 2, 2022. https://www.imf.org/en/Publications/CR/Issues/2016/12/30/Ireland-Selected-Issues-and-Statistical-Appendix-3631.

experience a massive economic fallout if they maintained their current economic climate. By 2006, the housing prices of Ireland had roughly doubled (relative to real estate prices in 2000).

Despite consistent public backlash over its economically unsustainable decisions, the ruling Irish government made little effort to change consumer behaviour.

Figure 2: ESRI house price index, 1996-2010[29]

In early 2007, demand for Irish residential property saw a fall alongside housing prices. As the Irish government had oriented its policies towards expecting a consistently growing demand for housing prices, they were unprepared for the fall in prices. The Economic and Social Research Institute (ESRI) House Price Index (Figure 2) — an index used to track housing prices within Ireland — provides a timeframe for the events of the property bubble burst.

The ESRI stated in their Summer 2007 Quarterly Economic Commentary (QEC) that Ireland would enter a public deficit,[30] claiming that that "Ireland may experience house price falls in the range of 50 per cent" and that "[the Irish government] is powerless to do anything about a subsequent bust".

[29] Gavin. "Esri/PTSB House Price Index Ireland." Flickr. Yahoo!, July 7, 2010. https://www.flickr.com/photos/gavinsblog/4771207381.
[30] *Monetary Policy Report Update*. Ottawa: Bank of Canada, 2007.

In the same year, Ireland witnessed a drop in their economy, sparking the beginning of a recession within their economy. This too would also cause an economic downturn within the Euro.[31] Subsequent economic meltdowns faced by Ireland can also find its roots in the Irish Property Bubble.

It is imperative to note that the Irish property bubble weakened Ireland's economic foundations, leaving them with traces of debt and a lack of any further economic recovery plans.[32] It also caused the neighbouring regions, and in extension, the eternity of Europe and beyond, to suffer losses of varying extent.[33] Furthermore, it showed incompetency within the Irish government, as a failure to make clear and concise decisions in a short span of time proved to the Irish citizens that the government was disorganised even in the most crucial moments. There was more fear and distrust within the Irish people as well as Europeans in general, as they were unsure if their governments had the capacity to handle any future economic meltdowns.[34] Furthermore, the dent that the bubble left on the economy made any potential complete economic collapse harder to recover from, especially for the Irish government. [35]

Global Financial Crisis/US Subprime Mortgage Crisis (2008)

The EU was not spared from the consequences of the 2008 Global Financial Crisis. Dependent on the US money market as a source of dollar finance, the EU was highly exposed to the losses in the US market on asset-backed securities.[36] Both investor and consumer confidence consequently declined. Higher interest rates in the EU — an initial reaction of the ECB to the mortgage crisis — and slow pace of subsequent interest rate cuts increased the cost of borrowing and dampened any increases in the EU economy's aggregate demand.[37] This inhibited the bloc's ability to recover from the economic recession.[38]

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[31] Donovan, Donal, and Antoin E. Murphy. *The Fall of the Celtic Tiger: Ireland and the Euro Debt Crisis*. Oxford, United Kingdom: Oxford University Press, 2014.
[32] Fitzgerald, Colm. "The Debt Crisis in Ireland." The Quarterly Review of Economics and Finance. North-Holland, November 10, 2012. https://www.sciencedirect.com/science/article/pii/S1062976912000695.
[33] "Housing Equity Withdrawal, Property Bubbles and Consumption." ResearchGate. Accessed November 2, 2022. https://www.researchgate.net/publication/241753556_Housing_Equity_Withdrawal_Property_Bubbles_and_Consumption.
[34] Byrne, David, David Duffy, and John FitzGerald. "Household Formation and Tenure Choice: Did the Great Irish Housing Bust Alter Consumer Behaviour?" The Economic and Social Review. Accessed November 2, 2022. https://www.esr.ie/article/view/979.
[35] "The Real Estate Bubble in Ireland. Policy Context and Responses." Taylor & Francis. Accessed November 2, 2022. https://www.tandfonline.com/doi/full/10.1080/17535069.2016.1174401.
[36] McGuire, Patrick M., and Goetz Von Peter. *The US Dollar Shortage in Global Banking and the International Policy Response*. Basilea: Bank for International Settlements, Monetary and Economic Department, 2009.
[37] Kang, Dae Woong, Nick Ligthart, and Ashoka Mody. "The ECB and the Fed: A Comparative Narrative." CEPR, January 19, 2016. https://cepr.org/voxeu/columns/ecb-and-fed-comparative-narrative#_ftn2ative#_ftn2.
[38] "European Sovereign Debt Crisis." Corporate Finance Institute, October 11, 2022. https://corporatefinanceinstitute.com/resources/knowledge/credit/european-sovereign-debt-crisis/.

The effects of these events were especially profound in Greece — the hardest-hit country in the European Debt Crisis — as the size of the country's already large national debt grew due to the increase in interest rates.[39]

Furthermore, the financial crisis triggered a re-analysis by investors on the sustainability of their investments.[40] The loss of investors' confidence consequently led to the tightening of credit conditions and withdrawal of private sector assets. The unfavourable economic and financial circumstances and loss in investors' risk-appetite compounded with subsequent domestic crises — particularly the Greek's falsification of debt position and the real estate crisis in Ireland and Spain — paved the way for the widespread fallout of the European Debt Crisis in 2011.

The Great Recession (2008–2012)

The Great Recession was a global recession that began in 2008. Though the recession originated from the USA, its effects quickly spilled over to the global economy, causing a massive economic downturn that crippled international trade and devalued assets.

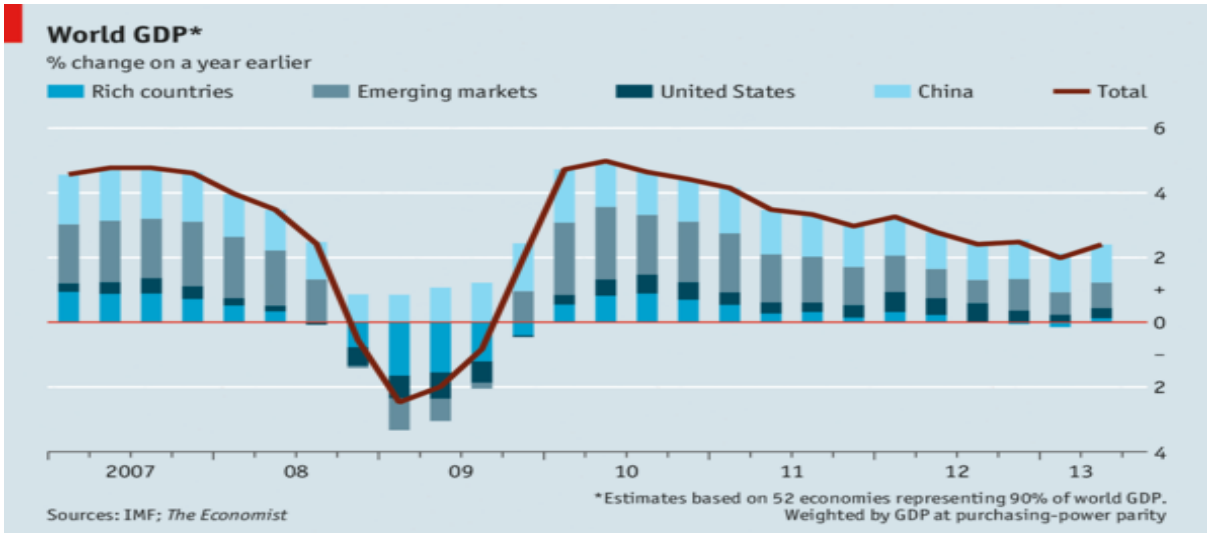

Figure 3: Global GDP following the Great Recession[41]

[39] Kaketsis, Asimakis, and Nicholas Sarantis. "The Effects of Monetary Policy Changes on Market Interest Rates in Greece: An Event Study Approach." International Review of Economics & Finance. JAI, December 22, 2004. https://www.sciencedirect.com/science/article/pii/S105905600400084X.

[40] "The European Sovereign Debt Crisis." American Economic Association . Accessed November 2, 2022. https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.26.3.49.

[41] "Could the 2008 Financial Crisis Have Been Predicted and Avoided?" World Economic Forum. Accessed November 2, 2022. https://www.weforum.org/agenda/2018/11/should-economists-have-foreseen-the-financial-crisis/.

The recession resulted from the US Subprime Mortgage Crisis and the domino effect that followed. The collapse of the US property bubble in 2007 caused the real estate market to crash.[42] Bursting of the property bubble led to financial institutions holding on to trillions of worthless investment, triggering a crash in bond markets.[43] Furthermore, the ability of over-leveraged banks and companies to meet their debt was pushed to its limit when the global investment bank Bear Stearns collapsed in March 2008.[44] Subsequently, the Lehman Brothers — then the fourth largest investment bank in the US — declared bankruptcy in September 2008[45].

Lehman Brothers' bankruptcy declaration caused a massive sell-off within the stock market, with fear-driven traders and consumers scrambling to withdraw whatever they could salvage out of their rapidly depreciating assets. The S&P 500 — a stock index tracking the largest 500 companies in the US — fell by 57.7% from 2008–2009 and US$10.2 trillion was vaporised in 2008 alone.[46]

The fall in investor confidence spread quickly to the rest of the world, causing a loss of more than US$2 trillion in global economic growth. The 2009 economic growth — lowest since the pre-recession peaks — resulted from the aggressive monetary policies from banks globally in response to the recession. While such monetary policy actions may have temporarily resolved the problems caused by the recession, they also lengthened the time it took for the broader economy to recover while weakening countries' buffer against future recessions.

In the second quarter of 2008, the EU's overall GDP fell by 0.1%. Germany, Spain, and the United Kingdom, according to the European Commission's prediction, will all enter a recession by the end of 2008, while France and Italy were predicted to have flat growth in the third quarter following second-quarter contractions. Ireland and Spain saw a drop in their fiscal position, thereby severely undermining the integrity of their public finances. France, Italy and the UK saw their underlying public finances weaken, each by just over 5% of their GDPs.[47] The weakened economic positions of Eurozone countries, particularly the PIIGS, primed them to be unable to respond accordingly to financial and economic shocks from the outbreak of the debt crisis.

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[42] Christiano, Lawrence J., Martin S. Eichenbaum, and Mathias Trabandt. "Understanding the Great Recession." NBER, April 10, 2014. https://www.nber.org/papers/w20040.

[43] Martins, Manuel M.F., and Fabio Verona. "Bond vs. Bank Finance and the Great Recession." Finance Research Letters. Elsevier, May 20, 2020. https://www.sciencedirect.com/science/article/pii/S154461232030180X.

[44] Sher Verick, Iyanatul Islam. "The Great Recession of 2008-2009: Causes, Consequences and Policy Responses." The Great Recession of 2008-2009: Causes, consequences and policy responses, March 5, 2012. https://www.ilo.org/employment/Whatwedo/Publications/working-papers/WCMS_174964/lang--en/index.htm.

[45] *Ibid*

[46] Carney, John. "America Lost $10.2 Trillion in 2008." Business Insider. Business Insider. Accessed November 2, 2022. https://www.businessinsider.com/2009/2/america-lost-102-trillion-of-wealth-in-2008.

[47] "How Did the Financial Crisis Change Europe?" World Economic Forum. World Economic Forum. Accessed November 2, 2022. https://www.weforum.org/agenda/2015/12/how-did-the-financial-crisis-change-europe/.

Consequences of the European Debt Crisis

Economic Impacts

During the period of the European Debt Crisis and beyond, the entirety of Europe faced massive economic impacts. The crisis had greatly influenced the global economy and trade via a drop in supply as well as greatly lowering consumer and investment demands.[48] This section seeks to cover some of these negative economic impacts in greater detail.

During and after the crisis, the global economy incurred massive losses. It was primarily caused by a downturn in global demand as well as a slowed global economy. The average annual growth rate of the global economy reduced by 0.65% from 2010 to 2012.

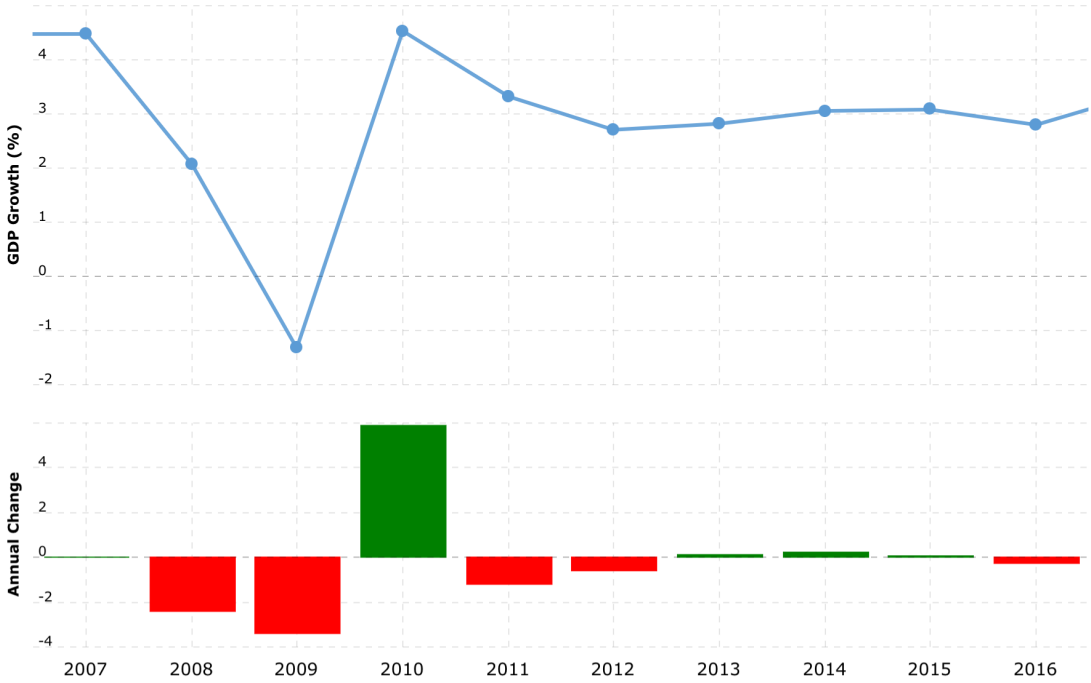

Figure 4: Graph of World GDP Growth Rate (2007 to 2016)[49]

Furthermore, the financial crisis, through inducing a drop in economic activity, induced layoffs. This can be seen in this case as well, with global unemployment rate has risen by 1.81%[50], while Greece faced unemployment rates as high as 27%.

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[48] This in turn leads to effects including but not limited to diminished demands, unemployment, bankruptcies, etc. Such effects will cause a diminished quality of life within the affected nations.

[49] "World GDP Growth Rate 1961-2022." MacroTrends. Accessed November 2, 2022. https://www.macrotrends.net/countries/WLD/world/gdp-growth-rate.

[50] "Impacts of the Euro Sovereign Debt Crisis on Global Trade and Economic ..." GTAP. Accessed November 2, 2022. https://www.gtap.agecon.purdue.edu/resources/download/6306.pdf.

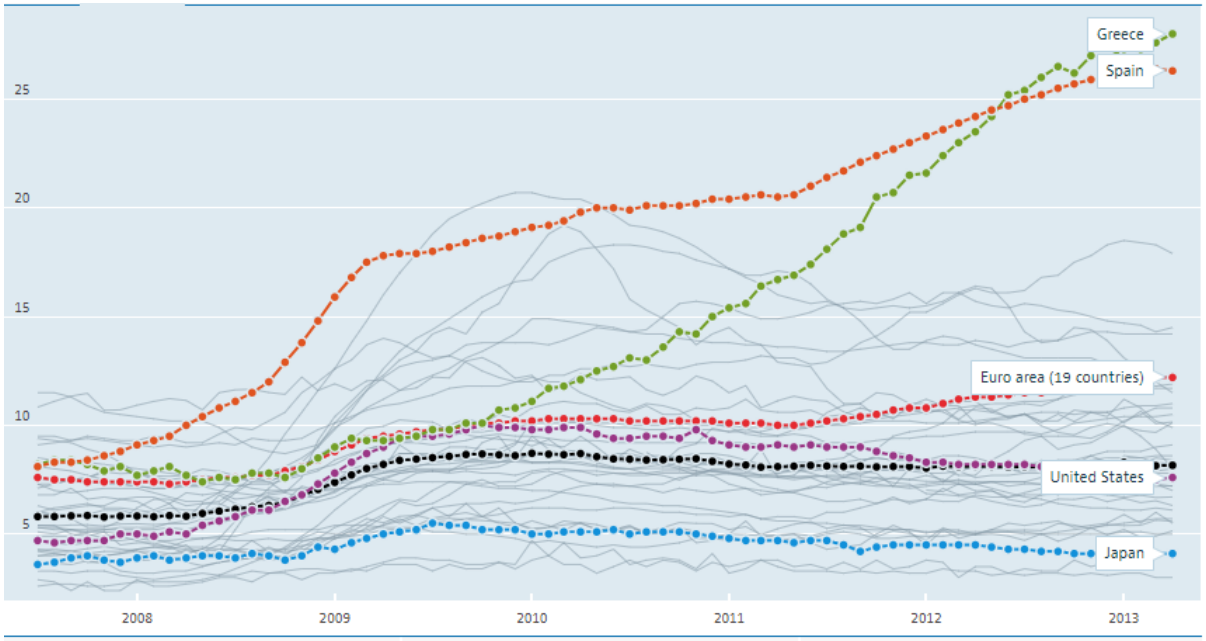

Figure 5: Graph of unemployment rates, measured by % workforce

Socio-political Impacts

The growing debt of the PIIGS (Portugal, Ireland, Italy, Greece and Spain) nations have also caused great tension among citizens within Europe and beyond. Investor worries, disorganised governments and yellow journalism all led to further socio-political impacts.

Ireland's Parliament collapsed in 2011 as a result of high deficit spending and public uncertainty, in the same year as its General Elections. Prior to the election, the ruling Fianna Fáil party attempted to pass a finance bill as part of their budgetary process through the Parliament in 2010, whose primary purpose was to lessen the growing debt burden that Ireland had through seeking a multibillion loan from foreign economic organisations and major nations.[51] Though it was passed, the bill was largely unpopular among the people, with primary fears revolving around a credit downgrade.[52] A culmination of similar shortcomings by the Parliament has also left the general public questioning the true effectiveness of the system.[53] Departing Irish Prime Minister Brian Cowen announced the dissolution of the Irish Parliament before the elections began, with the purpose of repositioning Ireland to better handle the crisis.[54]

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[51] Person. "Budget Threat to Multibillion Loan." independent. Independent.ie, November 29, 2012. https://www.independent.ie/breaking-news/irish-news/article2508837.ece.

[52] News, RTÉ "Green Party Withdraws from Government." RTE.ie. RTÉ, January 23, 2011. https://www.rte.ie/news/2011/0123/296831-politics1.

[53] "'If They Don't Start Listening to Us, the Future Is Going to Look the ..." International Conflict Research Institute. Accessed November 2, 2022. https://journals.sagepub.com/doi/abs/10.1177/0044118X10383644.

[54] "Brian Cowen Announces Dissolution of Irish Parliament." The Guardian. Guardian News and Media, January 28, 2011. https://www.theguardian.com/world/2011/jan/28/brian-cowen-ireland-parliament-dissolution.

Aside from the Irish Parliament collapsing, the Netherlands' First Rutte Cabinet also collapsed in 2012 following increasing tensions fueled by economic uncertainty. It was observed that the First Rutte Cabinet was indecisive amongst themselves, and a striking incident was when Piet Hein Donner, newly appointed Vice-President of the Council of State (Prime Minister), resigned in 2011. [55]

Aside from these two specific cases in detail, many nations, such as Portugal, Italy and Greece[56], had their state leaders resign in view of the debt crisis.[57] Failure to negotiate on economic treaties only further incited an instability in the political climate.[58]Abundant riots and strikes plagued the region, fueled by growing worries over economic stability.[59] Media dramatisation and widespread speculation catalysed for larger withdrawals from the European markets.[60]

[55] "Benoeming Spies Tot Minister Verwacht." NOS.nl - Nieuws, Sport en Evenementen. NOS Nieuws, December 16, 2011. https://nos.nl/artikel/322712-benoeming-spies-tot-minister-verwacht. *(in dutch)*

[56] Gerodimos, Roman, and Georgios Karyotis. "Austerity Politics and Crisis Governance: Lessons from Greece." SpringerLink. Palgrave Macmillan UK, January 1, 1970. https://link.springer.com/chapter/10.1057/9781137369239_15.

[57] "Understanding the Political Economy of the Eurozone Crisis." Accessed November 2, 2022. https://scholar.harvard.edu/files/jfrieden/files/friedenwalter2017.pdf.

[58] "Political Science and the Eurozone Crisis. A Review of Scientific ..." Accessed November 2, 2022. https://onlinelibrary.wiley.com/doi/full/10.1111/jcms.12788.

[59] "The Economic Crisis Seen from the Everyday." Taylor & Francis. Accessed November 2, 2022. https://www.tandfonline.com/doi/abs/10.1080/13604813.2012.696943.

[60] "Megatrend Revija Megatrend Review - Megatrend Univerzitet." megatrend univerzitet. Accessed November 2, 2022. https://megatrendreview.megatrend.edu.rs/files/pdf/SR/Megatrend%20Revija%20vol%2010-1-2013.pdf.

Mandate of the European Union

Principles Safeguarding the Competences of Nations and the European Union

The EU's mandate is founded upon the three principles of conferral, proportionality and subsidiarity:

1. The principle of conferral: "the EU has only that authority conferred upon it by the EU treaties, which have been ratified by all member countries",
2. The principle of proportionality: "the EU action cannot exceed what is necessary to achieve the objectives of the treaties",
3. The principle of subsidiarity: "in areas where either the EU or national governments can act, the EU may intervene only if it can act more effectively".[61]

The aforementioned 3 principles thus allow for and safeguard the appropriate division of competences between the EU and member states.

Division of Competences

The division of powers — known as competences — between the EU and individual member states has been broadly categorised by Articles 2 to 6 of the Treaty on the Functioning of the European Union into three competences: exclusive competences, shared competences, and supporting competences.[62]

In areas where the EU has been granted exclusive competences, its legislative bodies have the sole authority to pass legislation. The power of member states in exclusive competences is restricted to the enforcement and application of EU law. Exclusive competences have been granted in areas such as countries' monetary policy and the single customs union.[63]

Shared competences allow for legislation to be passed by both the EU and its member states, where member states are allowed to pass their own laws on matters as long as the EU has not already passed any relevant laws or has decided against legislating on the matter. Shared competences include areas such as the single market, employment and social affairs, and migration and home affairs.[64]

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[61] "Areas of EU Action." European Commission - European Commission, February 11, 2022. https://ec.europa.eu/info/about-european-commission/what-european-commission-does/law/areas-eu-action_en.
[62] "Lex - 12012E/TXT - En - EUR-Lex." EUR. Accessed November 2, 2022. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12012E%2FTXT.
[63] "Areas of EU Action." European Commission - European Commission, February 11, 2022. https://ec.europa.eu/info/about-european-commission/what-european-commission-does/law/areas-eu-action_en.
[64] *Ibid.*

In other areas where the EU has been granted supporting competences, it is only authorised to "support, coordinate or complement the action of member countries". It is unable to pass laws on these areas and only countries are empowered to do so.[65]

Special Competences

However, there also exist special competences that allow the EU to extend its jurisdiction beyond what it is empowered to act on under the three forms of competence. Special competences enable the EU to engage in the "coordination of economic and employment policies" and the "definition and implementation of the Common Foreign and Security Policy".[66]

Furthermore, the "flexibility clause" as provided by Article 352 of the Treaty on the Functioning of the European Union allows for the EU to, under specific circumstances, act on matters outside of its usual mandate.[67] The provisions of Article 352 apply to all competences.

The flexibility clause allows the Council of the European Union to, with the consent of the European Parliament, "act in areas where EU competences have not been explicitly granted in the Treaties but are necessary to the attainment of the objectives set out in the Treaty".[68] However, the use of Article 352 requires certain conditions: the Council of Europe must be unanimous in its decision to utilise the flexibility clause and must notify national parliaments of its use. The principle of subsidiarity still applies to the use of the flexibility clause.

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[65] *Ibid.*
[66] *Ibid.*
[67] "Lex - 12012E/TXT - En - EUR-Lex." EUR. Accessed November 2, 2022. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12012E%2FTXT.
[68] "The Role of the 'Flexibility Clause' : Article 352." European Commission . Accessed November 2, 2022. https://ec.europa.eu/info/sites/default/files/role-flexibility-clause_en.pdf.

The Crisis

The Council of the European Union has been convened to deal with the immediate financial problems that are plaguing Greece in 2009. With its budget deficit at 12.7%, there are concerns about a default on its loans which could destroy the Greek banking sector, themselves large holders of government debt, as well as a collapse of government provided social services. Greece is now calling for aid from the other Eurozone partners as well as other international organisations, many of which fear a deepening and broadening of the crisis.

However, the Maastricht Treaty,[69] Article 12 TFEU, of the European Union contains legal provisions that are intended to stop bailouts from occurring in the European Union. By guaranteeing that national governments are responsible for repaying public debt, the clause prevents risk premiums brought on by bad fiscal policies from spreading to partner countries. In addition, Article 123 TFEU prevents the direct purchase of credit belonging to nations within the Eurozone by the European Central Bank.[70] Richer nations like Germany have demonstrated reluctance to bail-out Greece without sufficient austerity measures implemented.

Additionally, the crisis revealed the SGP's core flaws. The failure to follow the clauses under Excessive Debt Procedure by certain countries within the Eurozone proved the lack of effectiveness of the SGP. This questions how Europe could adopt a firmer stance towards combating debt, as well as developing ways to better manage debt and economic crises.[71]

How will the ministers of the Council of the European Union proceed from here?

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[69] "Lex - 32022R0720 - En - EUR-Lex." EUR. Accessed November 2, 2022. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022R0720.

[70] Ie. Government Bonds

[71] Schuknecht, Ludger, Philippe Moutot, Philipp Rother, and Jürgen Stark. "The Stability and Growth Pact: Crisis and Reform." SSRN, September 26, 2011. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1791598.

Appendix A — Structure and Governance

Article 13 of the Treaty on European Union establishes the seven institutions governing the EU:[72]

1. The European Commission
2. The European Council
3. The Council of the European Union
4. The European Parliament
5. The European Central Bank
6. The European Court of Auditors

European Commission

The European Commission comprises Commissioners from each member state and is the main executive body of the EU. It is the only EU institution with legislative initiative — it is empowered to table laws for debate in the Council of the European Union and the European Parliament. The European Commission also represents the EU on the international stage.[73]

European Council

The European Council comprises the heads of states or governments of all EU member states and is the institution that sets the political direction and priorities of the EU. While not a legislative body, the conclusions adopted by the European Council serve to influence the agenda of the EU's legislative bodies[74] and are used to "identify specific issues of concern for the EU and outline particular actions to take or goals to reach".[75]

Council of the European Union

The Council of the European Union (the "Council") comprises government ministers of member states and is the main legislative body of the EU alongside the European Parliament.[76] The Council represents the governments of member states in the EU's decision-making process. There are no specific appointees to the Council: instead, the Council convenes in 10 different configurations

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[72] "European Union Institutions." EUR. Accessed November 2, 2022. https://eur-lex.europa.eu/EN/legal-content/glossary/european-union-institutions.html.

[73] "European Commission." European Union. Accessed November 2, 2022. https://european-union.europa.eu/institutions-law-budget/institutions-and-bodies/institutions-and-bodies-profiles/european-commission_en.

[74] "How the European Council Works." Consilium, September 23, 2022. https://www.consilium.europa.eu/en/european-council/how-the-european-council-works.

[75] "Setting the EU's Political Agenda." Consilium, June 16, 2022. https://www.consilium.europa.eu/en/european-council/role-setting-eu-political-agenda/. .

[76] "Council of the European Union." European Union. Accessed November 2, 2022. https://european-union.europa.eu/institutions-law-budget/institutions-and-bodies/institutions-and-bodies-profiles/council-european-union_en.

relating to the matter being considered. Member states will send an appropriate minister in charge of the relevant policies to attend these meetings.[77]

Together with the European Parliament, the Council coordinates member states' policies and drafts EU legislation under the direction of the European Commission. It also jointly adopts the EU budget with the European Parliament. The Council is independently charged with the EU's foreign and security policy, developing it along the direction set by the European Council.[78]

European Central Bank

The European Central Bank is charged with managing the EU's monetary policy and exchange rate policy within the Eurozone. It also sets the interest rates for lending to commercial banks.[79]

[77] *Ibid.*

[78] "Council of the European Union." European Union. Accessed November 2, 2022. https://european-union.europa.eu/institutions-law-budget/institutions-and-bodies/institutions-and-bodies-profiles/council-european-union_en.

[79] "ECB." European Union. Accessed November 2, 2022. https://european-union.europa.eu/institutions-law-budget/institutions-and-bodies/institutions-and-bodies-profiles/ecb_en.

Appendix B — Function of the European Union

Treaties of the European Union

Treaty on the Functioning of the European Union

Signed in 1957, the EU first established the Treaty Establishing the European Economic Community (also known as the Treaty of Rome) to serve as the constitutional foundation of the EU's organisational needs. Following amendments made by the Maastricht Treaty and the Treaty of Lisbon, the Treaty of Rome has been formally renamed the Treaty on the Functioning of the European Union.[80]

Treaty of the European Union

The Treaty of the European Union (also known as the Maastricht Treaty) was signed in February 1992 against the backdrop of the Cold War and the fall of the Berlin Wall. Faced with the prospect of German reunification and the Soviet Union's calls for reform and increased openness of the Soviet bloc towards the West, there was a sense of optimism about European political unity. Furthermore, the creation of the single market provided the impetus for further economic integration through the establishment of a shared currency.[81] It was thus that the signing of the Maastricht Treaty and the Treaty of Rome occurred during a period of optimism for the European project.

The Maastricht Treaty heralded the creation of the EU and is one of the two foundational treaties (the other being the Treaty on the Functioning of the European Union) forming the basis on which the EU was established. The Treaty focused on 3 key areas of integration: a common foreign and security policy and common economic and judicial systems. However, most notable amongst the Maastricht Treaty's achievements was the creation of an European common currency — the Euro.

Treaty of Lisbon

The Treaty of Lisbon was a constitutional reform amending several aspects of the Treaty on the Functioning of the European Union. Signed in 2007, the Treaty formally recognised the European Council as an EU institution and established its mandate and procedures.[82]

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[80] "Lex - 12012E/TXT - En - EUR-Lex." EUR. Accessed November 2, 2022. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12012E%2FTXT.

[81] "How Maastricht Changed Europe." Council of the European Union. Accessed November 2, 2022. https://www.consilium.europa.eu/en/maastricht-treaty/.

[82] "Shaping the EU as We Know It." Council of the European Union, November 30, 2021. https://www.consilium.europa.eu/en/lisbon-treaty/.

Besides the creation of the European Council as the seventh EU institution, the Treaty of Lisbon also made standard the use of co-decision in its decision-making processes and reinforced the principle of subsidiarity (discussed under Mandate of the European Union).[83]

The Euro and the Euro Area

The Euro was established as the successor to the 1979 European Monetary System (EMS) when the European Council charged the then-President of the European Commission, Jacques Delors, to report on measures to achieve greater economic integration and growth within Europe.[84] The resulting Delors Report proposed a three stage approach to introduce a common currency in Europe.[85] Besides the requisite preparatory procedures required to establish a single European currency, the Delors Report also proposed the establishment of the European Monetary Institute — the precursor to the European Central Bank — and an intra-EU Exchange Rate Mechanism (ERM II).

The ERM II was created to "ensure that exchange rate fluctuations between the euro and other EU currencies do not disrupt economic stability within the single market, and to help non euro-area countries prepare themselves for participation in the Euro area."[86] Though a country's participation in the ERM II is voluntary, it is considered a prerequisite for a country to be allowed to adopt the Euro as its currency. The ERM II achieves its goals by instituting certain rules relating to a country's exchange rate policy:

1. The creation of a bilateral central exchange rate between the euro and the country's currency, with fluctuations of ±15% above or below the central rate allowed,
2. Intervention (the buying and selling of foreign and domestic currency) in the foreign exchange market is to be done when necessary to keep the country's currency within the ±15% fluctuation band,
3. Intervention is to be coordinated by the central bank of the country and the European Central Bank.[87]

It was with the preparations and recommendations of the Delors Report that the Maastricht Treaty created the Euro area (colloquially known as the Eurozone), of which the Euro would be the common currency. The Euro area is the monetary union of the EU and consists of 19 member states: Austria,

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[83] *Ibid.*
[84] European Central Bank. "Economic and Monetary Union (EMU)." European Central Bank, October 20, 2022. https://www.ecb.europa.eu/ecb/history/emu/html/index.en.html.
[85] "European Commission." Accessed November 2, 2022. https://ec.europa.eu/economy_finance/publications/pages/publication6161_en.pdf.
[86] "ERM II – the EU's Exchange Rate Mechanism." Economy and Finance. European Commission . Accessed November 2, 2022. https://economy-finance.ec.europa.eu/euro/enlargement-euro-area/adoption-fixed-euro-conversion-rate/erm-ii-eus-exchange-rate-mechanism_en.
[87] *Ibid.*

Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain.[88]

The European System of Central Banks

To ensure economic stability and to consolidate the execution of intra-EU monetary policy through the Euro, the Maastricht Treaty established the European System of Central Banks and the European Central Bank. The European System of Central Banks comprised the European Central Bank and the national central banks of all member states, even if they had not adopted the Euro.[89] To complement the European System of Central Banks, the Treaty also established the Eurosystem, consisting of the European Central Bank and the national central banks of member states within the Euro area. The European System of Central Banks is charged with ensuring price stability and enhancing cooperation on monetary policy within the EU while the Eurosystem serves as the monetary authority of the Euro area and is charged with setting the monetary policy of the Euro area.[90]

To be able to adopt the Euro as a currency, countries must fulfil the economic and legal convergence criteria (known as the Maastricht criteria) set out in the Maastricht Treaty:[91]

1. Price stability
    a. The inflation rate cannot be higher than 1.5 percentage points above the rate of the three best-performing member states.
2. Sound and sustainable public finances
    a. The country should not be under the excessive deficit procedure (explained under the Stability and Growth Pact).[92]
3. Exchange rate stability
    a. The country has to participate in the Exchange Rate Mechanism (ERM II) for at least two years, without strong deviations from the ERM II central rate and without devaluing its currency's bilateral central rate against the euro in the same period.
4. Long-term interest rates

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[88] "EU Countries - the Member States of the European Union." SchengenVisaInfo.com, November 2, 2022. https://www.schengenvisainfo.com/countries-in-europe/eu-countries/.

[89] European Central Bank. "ECB, ESCB and the Eurosystem." European Central Bank, June 25, 2015. https://www.ecb.europa.eu/ecb/orga/escb/html/index.en.html.

[90] European Central Bank. "The ECB's Monetary Policy Strategy: Delivering Our Mandate in All Circumstances." European Central Bank, September 28, 2022. https://www.ecb.europa.eu/press/key/date/2022/html/ecb.sp220928~13fb6e1240.en.html#:~:text=The%20ECB%20provides%20one%20of,our%20primary%20objective%3A%20price%20stability.

[91] "Conditions for Joining the Euro Area: Convergence Criteria." Consilium, July 22, 2020. https://www.consilium.europa.eu/en/policies/joining-the-euro-area/convergence-criteria/.

[92] "Excessive Deficit Procedure (EDP)." Excessive deficit procedure (EDP) - Statistics Explained. Accessed November 2, 2022. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary%3AExcessive_deficit_procedure_%28EDP%29.

a. The long-term interest rate should not be higher than 2 percentage points above the rate of the three best-performing member states in terms of price stability.

Fiscal Policy in the European Union

The relinquishing of member states' authority to conduct their own monetary policy meant that they would be limited in their ability to respond to economic shocks, given that conventional economic policy consisted of fiscal policy and monetary policy. This meant that there had to be a degree of coordination of fiscal policy across the EU to complement the recently established monetary union, allowing for "fiscal risk-sharing across members".[93] This risk-sharing would dampen the effects of country-specific economic shocks.

The Stability and Growth Pact

While the creation of the Euro Area meant that the European Central Bank was given the mandate to set the EU's monetary policy, member states remained in control of their fiscal policy. This arrangement meant that while member states would not be responsible for reducing inflation rates, they remained able to conduct expansionary fiscal policies. As a result, member states were incentivised to "engage in excessive spending on the expectation that more fiscally responsible states would inevitably face a dilemma between bailing out their free-spending partners or else risk destabilising the currency".[94]

The Stability and Growth Pact (hereafter referred to as the "SGP") was thus established under Articles 121 and 126 of the Treaty on the Functioning of the European Union[95] to prevent the occurrence of such moral hazards. The creation of the SGP led to fiscal regulations — the excessive deficit procedure — regarding the size of government debt as well as punitive measures against persistent violations of the pact:

1. The budget deficit of a member state cannot exceed 3% of its GDP,
2. The government debt of a member state cannot exceed 60% of its GDP,
3. Violation of the aforementioned regulations may lead to fines up to 0.5% of a member state's GDP.[96]

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[93] "'Maastricht and the Crisis in Europe: Where We've Been and What We've Learned," by Reza Moghadam, Director, European Department, IMF." IMF, February 12, 2014. https://www.imf.org/en/News/Articles/2015/09/28/04/53/sp021214.

[94] Liberto, Daniel. "Stability and Growth Pact (SGP)." Investopedia. Investopedia, October 24, 2022. https://www.investopedia.com/terms/s/stability-growth-pact.asp.

[95] "Legal Basis of the Stability and Growth Pact." Economy and Finance. Accessed November 2, 2022. https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/stability-and-growth-pact/legal-basis-stability-and-growth-pact_en.

[96] "The Corrective Arm/ Excessive Deficit Procedure." Economy and Finance. Accessed November 2, 2022. https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/stability-and-growth-pact/corrective-arm-excessive-deficit-procedure_en.

Appendix C — Key Economic Terms and Theories

With regards to the economic nature of the topic, delegates are provided an Appendix that seeks to explain and define some key economic terms and theories. Delegates are to note that this Appendix is non-exhaustive and to conduct their individual research towards the content covered.

Glossary of Terms

Terms	**Definition**
Austerity Measures	Austerity measures are implemented to reduce government debt. Austerity refers to strict economic policies reducing government expenditure and increasing taxation. This differs from contractionary fiscal policy in terms of its severity: austerity measures are far more severe than contractionary fiscal policy. *see Economic Theories: Austerity Measures*
Balance-of-Payments	Balance-of-Payments comprises the current account and capital account. Balance-of-Payments is calculated through: *Current Account - Capital Account* Current account is the net trade flow vis-à-vis the rest of the world. It primarily consists of the trade of goods and services (ie. Export Revenue - Import Expenditure). Capital account is the net capital flow vis-à-vis the rest of the world. It consists of short-term investment (i.e. hot money), long-term investment (i.e. foreign direct investment) and portfolio investments (i.e. government bonds and company stocks).
Capital Flight	Capital flight is the outflow of capital from a country as a result of negative monetary policy (e.g., currency depreciation or low interest rates) or a fall in investor confidence.
Currency Intervention	Currency intervention occurs when a central bank purchases or sells its currency in the foreign exchange market in order to influence its

	value.
Basis Points	Basis points is the standard measurement for percentages in economics. 1 Basis Point is equal to 0.01%.
Budget Deficit	A budget deficit occurs when government expenditure exceeds government revenue gained from taxes. To combat budget deficits, governments must either draw on their fiscal reserves or borrow money.
Government Debt	Government debt refers to the total outstanding debt by the government. It is the amount of money the government has borrowed to cover its expenditure over time. High government debt may lead to investor concerns that a government may default (see sovereign default) on its debt.
Fiscal Policy	Fiscal policy is the deliberate use of government expenditure and taxation to achieve macroeconomic goals. There exists both expansionary and contractionary fiscal policy. Expansionary fiscal policy is the increase in government expenditure and cut in taxation to stimulate economic growth and employment. Contractionary fiscal is the decrease in government expenditure and hikes in taxation to reduce inflation and ensure price stability. *see Economic Theories: Fiscal Policies*
Fluctuation Band	Fluctuation band refers to the range of upper and lower value of which a currency is allowed to appreciate and depreciate to.
Foreign Exchange Market	The foreign exchange market is the market where currencies are exchanged.
Inflation Rate	Inflation rate refers to the increase in the general price level of a basket of goods across the economy.

	A healthy rate of inflation is typically considered 2% as it is an indicator of sustained economic growth.
Interest Rate	Interest rate is the amount charged on top of the principal by a lender to a borrower for the use of assets.
Macroeconomic Goals	Macroeconomic goals refers to the four (4) macroeconomic objectives of the government: ensuring sustained economic growth, high employment, price stability and a favourable balance-of-payment position.
Monetary Policy	Monetary policy is the action by the central bank to influence the level of economic activity, usually by influencing the money supply of the economy via interest rate and exchange rate. There exists both expansionary monetary policy and contractionary monetary policy. Expansionary monetary policy is the Dby depreciating domestic exchange rate and/or lowering interest rate. Contractionary monetary policy is the decrease in money supply by appreciating domestic exchange rate and/or increasing interest rate.
Sovereign Default	Sovereign default is the failure of a government to repay its debt. The government essentially becomes bankrupt. When defaults occur, there will be a major loss in investor confidence due to economic instability. This results in capital flight which will further destabilise the economy.

Economic terminology[97]

Economic systems: the organisation of production, distribution, exchange and consumption of goods and services used by people to achieve a standard of living

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- The *free-market economic system* uses private ownership, individual economic freedom, competition and market price system to achieve economic growth.

[97] Swanenberg, August. *Macroeconomics Demystified*. New York: McGraw-Hill, 2005.

- The *centralised economic system* uses private ownership and centralised control of the means of production. A central authority controls economic plans, and individual decisions play a limited role in determining economic policies.
- A *mixed economic system* mixes elements of both the free market and centralised system. It encourages the creation of a centralised government body to regulate certain areas of a free-market system.

Government budgeting*:* refers to the roles of a government towards stimulating and managing their economy through economic measures.
The government's *federal budget* is the annual statement of government's expenditure and tax revenues. Government expenditure could include the government's transfer payments, purchases of goods and services, and payments of government debt incurred. Government's revenue results from taxation, a monetary transfer made from individuals or groups to the governments.

Bullish: refers to a positive economic outlook (ie. expecting markets to rise)

Bearish: refers to a negative economic outlook (ie. expecting markets to fall)

Fiscal policies: the use of government expenditure and taxation to achieve macroeconomic objectives. There are important limitations to the short-term effectiveness of taxation as a form of fiscal policy. Tax law changes could take too long to be effective, and tax rate decisions could negatively impact economic outlooks. Furthermore, the amount of time policy makers take for decisions with relevance to fiscal policies is known as inside lag. Typically, the inside lag of fiscal policies is long, as the decisions are specific and require heavy considerations. Because of the long inside lag, monetary policies are usually employed to influence the economy in the short run.

Automatic fiscal stabilisers: features of a tax system that helps to stabilise GDP without the need for specific discretionary actions. Examples include income tax and social benefits. These features of fiscal policies can serve towards managing swings in a GDP.

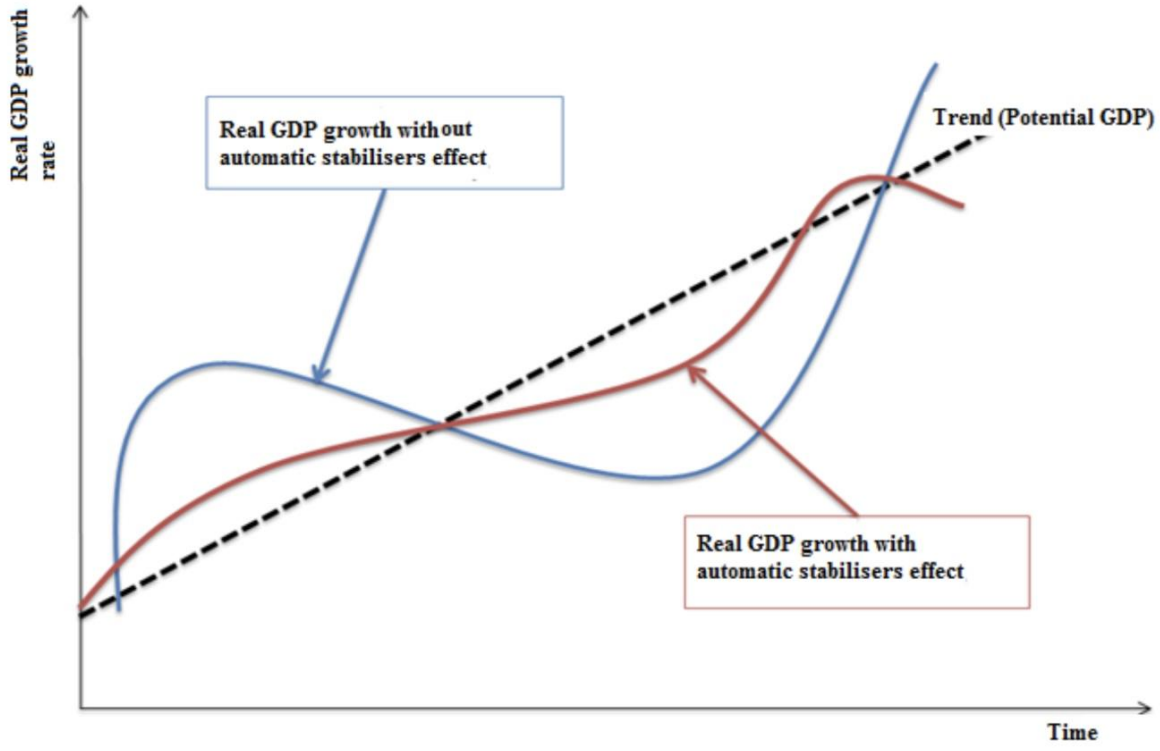

Figure 9: Real GDP and the effects of automatic stabilisers [98]

These automatic stabilisers can be activated to temporarily handle fluctuations in the economy, however, they cannot act as permanent solutions to economic crises.

Austerity measures: strict economic policies reducing government expenditure and increasing taxation. Increases in a country's public debt promotes financial instability that, if left unchecked, can incite a national or even regional recession. Austerity measures are the most extreme method undertaken to counter this threat, effectively overlooking long-term economic sustainability in hopes of immediate monetary recovery. Austerity measures, in essence, seek to cut losses by decreasing government expenditure on non-essential services. This would effectively allow for monetary gains made by the nation to overcome losses. Though austerity may appear as a good solution for economic crises, there are many limitations to it. Austerity measures decrease socio-political stability, with some effects including the increasing of unemployment, poverty, homelessness and other socio-economic risk factors, as well as reductions in health coverage and restricting access to healthcare.[99] One other key justification against austerity measures is known as the Classical Keynesian Theory, which argued that a country could spend its way out of a recession rather than bracing for economic losses by

[98] "An Approach of Social Policy in Terms of Macro-Stabilisation Function." Bucharest University of Economic Studies. Accessed November 2, 2022. http://store.ectap.ro/articole/1061.pdf.
[99] Stuckler, David, Aaron Reeves, Rachel Loopstra, Marina Karanikolos, and Martin McKee. "Austerity and Health: The Impact in the UK and Europe." OUP Academic. Oxford University Press, October 10, 2017. https://doi.org/10.1093/eurpub/ckx167.

decreasing spending. A premise within the theory believes that through anti-austerity measures, employment would rise, increasing demand and boosting the economy.[100] This, in theory, would allow for a nation to earn more than it loses, which would be a much better solution than that proposed by austerity measures. As such, it is worth noting the sensitivity and inherent risk of austerity measures.

Hawkish: an adjective that refers to a stance or monetary policy that is aggressive in nature. Hawkish behaviour typically is reflected when inflation and monetary stability is placed as the top priority.

Dovish: an adjective that refers to a stance or monetary policy that is conservative in nature. Dovish behaviour typically is reflected when inflation and monetary stability is not placed as the top priority, rather issues such as social stability and employment are seen as larger issues.

Bonds: contracts that represent a loan made by an investor to a borrower, typically by firms or governments. When firms or governments require funds, they may sell bonds to investors. The borrower issues a bond that specifies the loan conditions, interest payments, and the time frame for repaying the lent cash. The interest payment is part of the return on investment that bondholders receive for lending cash to the issuer. The discount rate of a bond is the value it is sold when compared to its typical value. When market interest rates move up, the discount rate of a bond rises, causing the value of the bond to fall as the cash flows are discounted at a higher discount rate, and vice versa.

Credit ratings: the score given by a credit rating agency to a borrower's risk of defaulting on its debt. It primarily affects the due diligence that investors take prior to making investments with the borrowers. Borrowers will typically seek to attain a higher credit rating, as it will signify their trustworthiness in repaying their debt, and as such, more investors would be willing to make investments with them. Credit ratings are never static, and can change should the credit rating agency see fit. Below is a list of types of credit ratings:

[100] Monastiriotis, Vassilis, Niamh Hardiman, Aidan Regan, Chiara Goretti, Lucio Landi, J. Ignacio Conde-Ruiz, Carmen Marín, and Ricardo Cabral. "Austerity Measures in Crisis Countries - Results and Impact on Mid-Term Development - INTERECONOMICS." SpringerLink. Springer-Verlag, February 15, 2013. https://link.springer.com/article/10.1007/s10272-013-0441-3.

Credit Ratings Scale: Highest to Lowest

Standard & Poors	Moody's	FitchRatings
AAA	Aaa	AAA
AA	Aa	AA
A	A	A
BBB	Baa	BBB
BB	Ba	BB
B	B	B
CCC	Caa	CCC
CC	Ca	CC
C	C	C
D		RD
		D

Figure 10: Types of credit ratings [101]

Do note that there are further divisions for credit ratings. For instance, the S&P can denote a smaller division with a + or - (ie. BB+ or CCC-) . This gives a more precise reading of its credit rating. Factors that affect credit ratings include but are not limited to[102]:

- The borrower's payment history, including any missed payments or defaults.
- The amount the borrower owes
- Current cash flows and income.
- The market outlook for the company or organisation.

Junk bonds: bonds that have a high risk of default. They are typically sold by borrowers who have a low credit rating. They pay a higher yield than typical bonds as they seek to compensate for the risk that investors take when purchasing such bonds.

[101] Kagan, Julia. "Credit Rating: What It Is and Why It's Important to Investors." Investopedia. Investopedia, October 4, 2022. https://www.investopedia.com/terms/c/creditrating.asp.
[102] Ibid.

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