Social structures of accumulation in Greece, 1980-2014

Angeliki Papadopoulou
Department of Economics, University of Athens, Greece.

Giorgos Gouzoulis
Reseach Fellow
UCL Institute for Innovation and Public Purpose

UCL Institute for Innovation and Public Purpose

WORKING PAPER
WP 2019-11

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This report can be referenced as follows:

Papadopoulou, A. and Gouzoulis, G. (2019). *Social structures of accumulation in Greece, 1980-2014.* UCL Institute for Innovation and Public Purpose, Working Paper Series (IIPP WP 2019-11). Available at: https://www.ucl.ac.uk/bartlett/public-purpose/wp2019-11

Social structures of accumulation in Greece, 1980-2014

Angeliki Papadopoulou [a] and Giorgos Gouzoulis [b]

Abstract

This paper examines the domestic and transnational social structures of accumulation in Greece over the period 1980-2014. Our historical analysis suggests that the Greek neoliberal growth model was based on three pillars: the liberalisation of international trade, capital mobility and finance within the EU; the expansion of the welfare state; and the liberalised labour and industrial relations. Our econometric findings provide robust evidence that trade openness, the liberalisation of international financial institutions and the wage share have been increasing capital accumulation in Greece since 1980, while public social spending has been decreasing it. Therefore, the Greek crisis was initially triggered by the collapse of the terms of international trade accord, i.e. the breakdown of the international trade and finance flows within the EU after the 2008 financial crisis. The subsequent collapse of state-citizen accord, due to the EU-imposed austerity programmes, further induced the demise of the Greek neoliberal SSA.

Keywords: Capital accumulation; Greece; Institutions; EU integration

JEL codes: B51; B52; O43

Acknowledgements:

The authors are grateful to Collin Constantine, Simone Gasperin, Thanasis Maniatis, Josh Ryan-Collins and Asker Voldsgaard for valuable comments on earlier versions of this paper.

[a] Department of Economics, University of Athens, Greece.

[b] UCL Institute for Innovation and Public Purpose, University College London (g.gouzoulis@ucl.ac.uk).

1. Introduction

The social structures of accumulation (SSA) theory emerged as a middle-range crisis theory that stresses the importance of institutional structures and power for the capital accumulation process, combining insights from the Marxian and the Keynesian political economy (McDonough 2008). In its early stages, the SSA approach was developed as an alternative, Marxist-inspired explanation of the late 1970s stagflation crisis in the US (Gordon 1978; Gordon et al. 1982; Bowles et al. 1983, 1986). According to this framework, capital accumulation depends on institutional relationships, i.e. social accords, which define the balance of power among capital, labour and the state, given the international economic and political relations. The establishment of a set of social, economic and political institutions favourable to capital enhances capital accumulation, and thus leads to growth. As these particular accords eventually break due to either external or endogenous causes, a slowdown in accumulation follows. The period of stagnation persists until new social coalitions are formed and a new set of institutions is developed.

As the SSA framework was inspired by the US experience during the 'Golden Age', most of the literature is US-centred, with few exceptions. The relevant literature focuses on two historical forms of SSA: the state-regulated, postwar SSA (1945-1970s) and the disputed global, neoliberal SSA (1980-present). While the majority of studies scrutinise the US, gradually research has been extended to South Africa (Natrass 1992; Heintz 2002), Ireland (McDonough 2010; McDonough and Dunton 2010), Mexico (Murphy and McDonough 2012), China (O'Hara 2006; Li and Qi 2014), South Korea (Jeong 1997), Jamaica (Hamilton 1994) and Greece (Mihail 1993, 1995). This literature shows that the SSA framework can effectively bridge the gap between political and macroeconomic analyses of capitalist crises, and link the co-evolution of variegated domestic and transnational neoliberalisation processes, which can vary substantially (Brenner et al. 2010). In this way, it can offer important insights, especially for financially integrated countries that have experienced a prolonged slowdown in accumulation since the 2008 financial crisis, such as the European South (Bassens et al. 2013). These economies constitute interesting case studies from an economic perspective, but also a political and institutional perspective, as many of them were under military dictatorships until as late as the mid-1970s. Thus, the European South transitioned directly from autocracy to neoliberalism, without a state-regulated SSA with an extensive welfare expenditures in between, as in the Anglo-Saxon world. Greece is a prominent example of a country that has been overlooked within the SSA literature during the last two decades.

Interestingly, the only two studies that have examined Greece from an SSA perspective are the papers of Mihail (1993, 1995). However, they focus on the period between 1963 and 1990. Therefore, this paper contributes to the SSA literature through a historicised institutional analysis of the Greek neoliberal growth model and its impact on capital accumulation. Prioritising depth of knowledge, rather than following the positivist logic of large samples (Clift 2014, pp. 299-300), we choose to centre on a single representative case study. Considering Greece a substantively important case study (Mahoney and Goertz 2006, pp. 42-3), single-country analysis can offer important insights. We follow a mixed-methods approach (Brady and Collier 2004), combining historical and quantitative analysis, which allows a deeper understanding of the rise and the crisis of Greek neoliberalism. Our historical analysis suggests that the Greek variant of the neoliberal

SSA was based on three main pillars: the liberalisation of international trade, capital mobility and finance under the convergence agreements within the European Union (EU); the expansion of the welfare state; and the liberalised labour market institutions and industrial relations. Building on that, we estimate and compare the effects of proxies for the three pillars on the capital accumulation rate over the period 1980-2014. Our econometric findings support our historical analysis, suggesting that international financial institutions and the capital-labour relations fostered accumulation during neoliberalism.

The rest of this paper is structured as follows. Section two discusses the SSA framework and the related empirical literature. Section three offers a qualitative analysis of how institutional structures and power relations have shaped the growth model of the Greek economy since the 1960s. Section four presents the econometric design for the analysis of the determinants of capital accumulation. Section five reports the econometric findings and section six discusses their implications.

2. Social structures of accumulation: From the 'Golden Age' to neoliberalism

2.1 The rise and fall of the regulated Fordist SSA

In the late 1970s and early 1980s, Gordon (1978), Gordon et al. (1982), and Bowles et al. (1983, 1986) developed an alternative explanation of the stagflation crisis in the US, incorporating elements from the Marxian and the Keynesian political economy (McDonough 2008). This middle-range, interdisciplinary analytical framework focused explicitly on how economic, political and power relations determine domestic institutional structures, and thus the growth model of the economy, i.e. the SSA. Accordingly, the early SSA scholars distinguished between four main institutional pillars that shape growth, with reference to the 'Golden Age' era in the US: (a) the capital-labour accord; (b) the state-citizen accord; (c) the terms of international trade; and (d) the degree of inter-capitalist competition/rivalry.

The Capital-Labour accord refers to the agreement between workers and capitalists, which aims to ensure macroeconomic stability through higher profitability (Phillips 1992). Assuming that profitability, hence, investment is the key driver of growth, relatively low wages can offer supply-side incentives. According to Gordon et al. (1987), industrial peace in the post-WWII era was secured through a mutual compromise between workers and capitalists: workers agreed that capitalists will control the production process on a promise of higher wages and better working conditions as a result of future spillover effects of growth.

The second institutional pillar of the SSA, the state-citizen accord, refers to the means and the degree of state intervention. During the post-WWII period, the US state became more interventionist through the adoption of Keynesian expansionary fiscal policy. The growth of the welfare state promoted social tranquility, retained unemployment in relatively low levels and indirectly fostered profitability through higher demand.

The SSA approach also emphasises the crucial role of the position an economy holds within the broader global economy, i.e. the terms of international trade. The international hierarchy of the economies is the outcome of transnational economic institutions and political agreements, but it is also subject to the historical contingency. For example, in the aftermath of WWII, the US economy was relatively strong compared to the economies of the defeated countries, a global power hierarchy that is often described as the *Pax Americana*. An important aspect of this arrangement was the Bretton Woods agreement, which attempted to establish global exchange rate stability by making the US dollar the dominant reserve currency (Bordo 1993).

The last institutional pillar that determines capital accumulation and growth according to the SSA framework is the degree of inter-capitalist competition/rivalry, both at the international and the domestic levels. Inter-class conflict can result either from institutional structures, e.g. strategic alliances between countries and domestic oligopolistic market structures, or from exogenous historical circumstances, e.g. wars (Lippit 2010; Gordon et al. 1987). The reduced level of the inter-capitalist rivalry of the early post-WWII period contributed significantly to higher accumulation rates in most advanced economies (Lippit 2010).

While similar institutional arrangements also existed in other advanced economies in this era (Lippit 2010), one should not necessarily expect the same accords within different economies during a specific SSA (Gordon et al. 1987; Lippit 2010). Eventually, these accords break as their fragile nature depends on mutual agreements among social groups with conflicting interests. This breakdown, triggered either by endogenous or exogenous factors, leads to a slowdown in macroeconomic performance. The recession period triggers a new policy debate on the way out of the crisis that ultimately results in new social coalitions and (potential) mutual compromises, i.e. in a new SSA regime.

Inspired by this framework, a variety of studies have examined post-war growth in the US. Weisskopf et al. (1983) estimate the determinants of aggregate productivity growth for the US over the period 1948-79. They find that the declining real spendable earnings, the decreasing cost of job loss, the increasing accident rate and lagging business innovation explain the productivity slowdown of the 1970s. Bowles et al. (1986) estimate the determinants of the net after-tax profit rate of the non-financial corporate sector and the determinants of profit expectations (proxied by Tobin's Q) between 1951 through 1979. They report that the decline in profitability was driven by the decrease in the cost of job loss over the period 1966-73, the erosion of the *Pax Americana* and the decline in capacity utilisation in the 1973-79 period. Bowles et al. (1989) focus on the 1955-86 period and estimate the effects of product market tightness, import penetration, technical innovation and a price-control dummy—as proxies for the conservative policies in the US during the late 1970s—on profitability. They find that decreasing product market tightness and technical innovation, and increasing import penetration and price controls, decreased profitability—concluding that the conservative agenda failed to stop the decline of the US post-WWII SSA.

Nilsson (1996) scrutinises the breakdown of the capital-labour accord in the US over the period 1948-92. His findings show that the decline in the cost of job loss, welfare state retrenchment and the decay of the *Pax Americana* triggered the rise of unfair practices by employers.[1] These practices induced the collapse of the capital-labour accord, but also urged a slowdown in profitability. Gordon (1997) examines whether the upswing of productivity growth of the 1940-79 period was the outcome of the consolidation of a new capital-labour accord. He reports that the key drivers of profitability were both endogenous and exogenous, including the impacts of the Korean and Vietnam Wars, the Nixon wage-price controls, the 1959 steel strike and the mid-1960s wage-price guideposts.

Shifting the focus from the US, Stain and Grant (1992) argue that the growth rates in Canada from 1945 to the early 1980s were driven by US foreign direct investments in Canadian resource industries, the implementation of the Keynesian stabilisation policies and the industrial relations, which were characterised by a consensus between capital and labour. After the decline of the US hegemony, the extensive reliance on foreign investment that impeded the exercise of independent fiscal and monetary policy, as well as the collapse of the capital-labour accord led to the erosion of this SSA. Jeong (1997) studies the rise and demise of the South-Korean SSA during the period 1960-90, claiming that the *State-Capital* accord, i.e. a fifth distinct pillar, played a key role. This reflects the effect of the authoritarian, interventionist Korean State during this era. Social movements as the Great Workers' Struggle and the Great Civil Movement in 1987 initiated the democratisation of Korea and led to the collapse of the imposed *State-Capital* and *State-Citizen* accords. Natrass (1992) reports that manufacturing profits in South Africa declined from 1948 to 1989, hence, she argues that the relationship between the Apartheid and domestic capitalists did not result in the establishment of an SSA. Heintz (2002) examines the fluctuations of capital accumulation rates in South Africa, during the Apartheid period (1955-74), challenges Natrass's (1992) profit-centred analysis. His findings provide evidence that political uncertainty, due to the mobilisation against the Apartheid since the mid-1970s, was the primary cause of the sharp decline of accumulation and the collapse of the South African SSA.

2.2 Neoliberalism and the post-Fordist SSA

In the mid-1970s after the collapse of the regulated Fordist regime, initially in the US and the UK, a shift back to liberal policies took place. This economic, political, and ideological transformation is frequently described as neoliberalism: a path-dependent, country-specific pro-capital structural shift that occurred within an interconnected globalised pro-capital institutional framework (Brenner et al. 2010).

There is an ongoing debate within the SSA literature on whether neoliberalism constitutes a new social structure of accumulation (McDonough 2008). While this contemporary stage of capitalism is indeed a coherent pro-capital institutional system, it has not created a significant pace of capital

[1] Proxied by unfair labour practice charges filed with the NLRB.

accumulation, as compared to the postwar era (Kotz 2011). This controversy has led either to the renunciation of neoliberalism as a new SSA (Wolfson 2003) or to its reinterpretation of the post-Fordist regime as a complex globalised institutional structure that consists of two interconnected elements: neoliberalism and globalisation (Kotz and McDonough 2010). On the one hand, neoliberalism relates to domestic pro-capital policy reforms such as the minimising of state intervention, the privatisation of state enterprises, and inflation targeting. On the other hand, globalisation fostered capital mobility and the geographical extension of capitalism. More specifically, capital circulation was increased due to rising state 'hospitality' to foreign direct investment (Bryan 1995).

Additionally, innovations in information, communication and transportation technologies played a complementary role. Aside from physical capital, the massive intensification of international financial activity enhanced further capital mobility. The most significant outcome of the increased capital mobility was the segmentation and allocation of production throughout the world, so that each part of the production process relocates in the most cost-effective area. Kotz (2011) claims that the separation of production and the highly integrated division of labour undermined the bargaining power of workers. The new production processes (just-in-time production, flexible specialisation, part-time labour) made workers easily replaceable, while corporations used the threat of relocation as a means to retain control over labour, as argued in the spatialisation literature.

Another two core aspects of the neoliberal institutional structure are the welfare state retrenchment and the taxation policy reform that shifted the burden towards labour. Contrary to the prevalent misconception that neoliberalism is about minimal state intervention, Kotz and McDonough (2010) argue that Thatcher's and Reagan's administrations intervened actively to disempower trade unions. From a politics perspective, rising income inequality and political inefficiency provoked social unrest, leading the state to engage in even more repressive policies to retain social control.

On the international level, globalisation required the establishment of transnational institutions to set the rules for international economic and political cooperation. Such multi-level political processes led to the creation of institutions like the World Trade Organisation (WTO), the North American Free Trade Agreement (NAFTA), the G8, the Organisation for Economic Co-operation and Development (OECD), the Kyoto Protocol and the European Union (EU). At the same time the role of institutions such as, the International Monetary Fund (IMF) and the World Bank in financing developing countries, but also in imposing structural adjustment programmes promoting the neoliberal agenda, became more prominent (*ibid.*). The outcome of this new set of international institutions was the partial restoration of the US hegemony.

Finally, yet importantly, the nature of inter-capitalist rivalry also changed during the neoliberal period. The attenuated and co-respective competition of the post-Fordist regime gave place to unrestrained, cut-throat competition in the product market, both at the domestic and the international level (*ibid.*).

Combining insights from the SSA approach and spatial analysis, Grant and Wallace (1994) examine spatial reconstructing in the manufacturing sector of 48 US states over the period 1970-85. Their estimations suggest that the key drivers of the decision to relocate were the rate of unionisation and labour militancy, while election timing and the ideology of the local governor played a secondary role. By the same token, Brady and Wallace (2000) utilise the same sample of 48 US states and provide econometric evidence that foreign direct investment weakened the organisational capacity of labour and decreased its income share from 1978 to 1996. In his study of the US neoliberal SSA over the period 1997-2007, Kotz (2009) argues that economic growth became possible through a demand boost driven by increasing household indebtedness, since the labour share remained stagnant for several decades. Inevitably, this unsustainable SSA model led to a systemic financial crisis and its collapse. Lippit (2014) analyses the erosion of the US capital-labour accord over the period 1981-2001 and suggests that, while unionisation remained roughly stable in the public sector, it declined rapidly in the private sector. This induced higher inequality and thus a decrease in consumption, which restrained economic growth in the era before the housing bubble.

Murphy and McDonough (2012) examine the dual effects of cross-border spatial restructuring on the capital-labour accord, based on the case study of the US-owned automotive industry in Mexico from 1992 to 2006. Their results demonstrate that low labour cost, proximity to the US and import protection served as credible relocation threats to both US and Mexican labour, increasing their vulnerability.

Strain and Grant (2015) explore the Canadian SSA over the period 1985-2015. Similar to the US, privatisations, deficit reduction and transnational free trade agreements were key aspects of Canada's neoliberal growth model. However, the Canadian state pursued income redistribution policies and until 2006 expanded the welfare state, while unionisation did not decline sharply, as in the US. These elements led to relatively lower inequality and stable profitability, and no major domestic asset bubbles, which allowed Canada to get through the Great Recession with moderate costs.

Focusing on the Caribbean, Hamilton (1994) explores the Jamaican SSA over the period 1972-87, centering on real wages, prices and productivity. He reports that the cost of job loss, workers' motivation, self-employment, the wage share, consumer price expectations and the real wage resistance exhibit robust effects on real wages, prices and productivity, arguing that social structures have played a critical role for the Jamaican growth model.

Shifting the focus of the literature to Asia, O'Hara (2006) constructs an SSA Index of Performance and Potentiality (IPP) for the Chinese economy since the early 21st century, including proxies for labour productivity, investment, surplus labour moving from rural to urban areas, markets, living standards, global power, governance, capital productivity, innovation and pollution. O'Hara concludes that China was developing a sustainable SSA, which would allow it to transform into an advanced economy by 2020, as indeed happened even earlier than that. Accordingly, he argues that capital productivity, environmental pollution, and inequalities between rural and urban areas are likely to cause the decline of the Chinese SSA. Li and Qi (2014) reconsider the Chinese SSA by focusing on the impact of labour market institutions on capital accumulation during the late 2000s. They argue that the subordination of labour in the workplace and excessive overtime work, due to increased labour market competition, facilitated capital accumulation in the late neoliberal period.

Finally, McDonough (2010), and McDonough and Dunton (2010), scrutinise the collapse of the Irish variant of the neoliberal SSA over the period 1987-2007, claiming that its crisis was a multidimensional phenomenon driven by exogenous and endogenous factors. These included asset bubbles related to financial globalisation, the stagnating labour share and the collapse of the domestic private banking system.

3. Politics, power and capital accumulation in Greece: 1960-2014

Greece's SSA regime in the post-WWII era constitutes an important representative example of the dynamics of socio-economic and institutional complementarities in the European South. Unlike the Anglo-Saxon and continental European economies, Greece did not experience a rapid growth expansion during the post-WWII 'Golden Age' reconstruction period, i.e. right after WWII, due to the five-year civil war between 1945 and 1950. A milder reconstruction phase took place later, from the early 1950s up until 1973, but under authoritarian political regimes. Consequently, the Greek economy never experienced a proper social democratic growth period. This translates to no significant increases in its wage share and to historically low union power, contrary to what happened in most Anglo-Saxon and continental European economies. In this respect, Greece transitioned directly from authoritarian and military regimes to the EU-induced neoliberalism.[2]

Interestingly, only two studies by Mihail (1993, 1995) have analysed the growth process in post-WWII Greece from an SSA perspective. Both articles appeared in the mid-1990s, hence their analysis does not include the Eurozone integration process and the collapse of the Greek variant of the neoliberal SSA. Ioakimoglou and Milios (1993) and Tsaliki and Tsoulfidis (1994) also offer descriptive analyses of different measures of capital accumulation and profitability for Greece over the period 1955-89, based on the Classical Marxian approach, but without considering the role of institutional complementarities and politics. In a more recent paper, Tsoulfidis and Tsaliki (2014) demonstrate the linkage between capital accumulation and the Marxian profit rate in the Greek economy between 1960 and 2014 using econometric estimations. However, unlike Mihail (1993, 1995), their econometric analysis does not include any proxies for the bargaining power of labour, trade and financial openness or politics.

With regard to the period 1963-81, Mihail (1993) relates the two contrasting phases of industrial accumulation in Greece with the rise and demise of an early post-war SSA. He examines how the evolution of the SSA affected the profit rate, which in turn determined industrial investment. He

[2] This is similar to other southern European economies, such as Portugal and Spain, which were ruled by dictatorships until 1974 and 1975, respectively.

stresses the importance of three main pillars: the imposed industrial peace; the outward-looking industrialisation process; and the capital-labour power relations. Industrial peace was the result of the government-controlled labour movement. The oppressive labour market institutions restricted strike activity, while low unemployment subsidies combined with high unemployment rates increased the cost of job loss. Alongside this, government investment incentives enhanced profitability for the export-oriented sectors of the economy under the Association Agreement between the EEC and Greece. Ultimately, this reflected the power relations between foreign and domestic capital owners. Beyond profitability, Mihail argues that capital accumulation has also been induced by the commitment of the state to industrialisation. This is demonstrated by the central bank's real long-term interest rate policy and the volatility of international transactions that affected the prices of imported raw materials and capital goods.

Building on his historical analysis, Mihail (1993) estimates the determinants of the net after-tax profit rate and the capital accumulation rate in the large-scale manufacturing sector. His econometric findings suggest that capital accumulation, the cost of job loss, nominal trade protection and the adjusted terms of trade exhibit robust positive effects on profitability. The results also show that the corporate tax rate and the rate of change of budget deficit are decreasing profitability over this period. Regarding capital accumulation, he finds that profitability, the terms of trade and the real long-term interest rate were its key drivers from 1963 to 1981.

In a follow-up study, Mihail (1995) shifts his focus to the labour productivity slowdown in Greece over the period 1963-90. In his econometric modelling approach, Mihail attempts to compare a range of competing arguments, using the rate of change of real output per man-hour employed in the non-farm business sector as a proxy for labour productivity. The explanatory variables include: technical variables, e.g. capacity utilisation, capital intensity and fuel prices; variables related to the domestic SSA, e.g. the cost of job loss and strike activity; and indicators related to the convergence hypothesis, e.g. the Greece-US productivity ratio (as proxy for the catch-up effect) and the infrastructure investment rate. The results indicate that capital intensity and the cost of job loss are increasing labour productivity, while the impacts of the catch-up productivity effect and strike activity are negative. Based on these findings, Mihail concludes that the SSA framework and the convergence hypothesis can explain adequately the decline in labour productivity in Greece between 1963 and 1990.

This paper extends this analysis to the late neoliberal period by examining capital accumulation in Greece over the period 1960-2014. Like Heintz (2002) and Li and Qi (2014), we scrutinise the evolution of capital accumulation (proxied by gross fixed capital formation) and contrast it with political and institutional restructuring processes during this period.

As shown in Figure 1, from 1960 to 1973 capital accumulation approximately tripled. The post-civil war period between 1950 and 1967 was characterised by political instability and repression, since the country was under (short-lived) right-wing or national liberal quasi-authoritarian coalition governments. For instance, one of the outcomes of the civil war was that the Communist Party was banned until 1974. Political repression escalated further between 1967 and 1974 when Greece was under a military dictatorship. During these periods, the increase in accumulation is steeper, which reflects the imposed industrial peace by the military regime, which fostered foreign capital inflows (Mouzelis 1976; Mihail 1993). Indicatively, the government appointed the leaders of Greek trade unions until 1974 (Ioannou 1999). This has significantly undermined workers' trust in trade unions as representatives of their rights, a distrust that persists today.[3]

In the period of political transition to democracy, i.e. from 1974 to 1979, the Greek economy appears to rebound from the sharp decline of capital accumulation that succeeded the fall of the dictatorship. In the 1980s, we observe a slightly declining trend in capital accumulation. In this era, Greece was governed by PASOK, the first social-democratic administration of its postwar history. The slowdown of accumulation might be explained to some extent by pro-labour reforms undertaken by this government. It is worth noting that, although the first PASOK administration (1981-5) increased social security transfers (Maniatis 2006), it also implemented the first austerity programme in post-WWII Greece after its re-election in 1985 (Tsakalotos 1998, p. 118). This fact challenges its classification as social-democratic. The volatility of accumulation during the period 1989-96 reflects the political instability and uncertainty of this period, because of the interchange between centre-left and conservative governments, due to the political scandals of the 1988-9 period (Pridham and Verney 1991).[4]

During the period 1996-2007, capital accumulation in Greece grew quite rapidly. Despite the country being again governed by the social-democratic party (PASOK) until 2004, the new prime minister implemented a rather right-wing, pro-capital agenda that fostered accumulation. This policy agenda included further deregulation of the labour market, aiming to meet the EMU convergence criteria (Ioannou 1996). It should be noted that when Greece entered the Eurozone in 2001 it sacrificed an important policy tool: monetary autonomy. The implicit international political economy trade-off of the Eurozone project included access to cheaper credit for the European South, due to the credibility of EU institutions (Hancké 2013), and enhanced international price competitiveness for the export-oriented European North, due to the Euro's exchange rate.[5] The loss of international price competitiveness for the European South, along with the simultaneous decrease in the interest rates, which induced capital flows, gave rise to an unsustainable debt-driven boom period (Stockhammer et al. 2016; Fouskas and Dimoulas 2016). Nevertheless, as noted by Lapavitsas (2019), in the case of Greece it was not the foreign banking system that led this process, but domestic banks who managed to obtain cheap liquidity through the Eurozone interbank market. In this respect, the macroeconomic impact of financial liberalisation in Greece must be explored from a transnational perspective, a dimension that is commonly missing in financialisaton studies (Christophers 2012). In addition, the exogenous

[3] Historically, even after the fall of the Junta, political parties controlled certain Greek unions. Thus, their strategy depended on what the ruling party was rather than on the interests of their members.

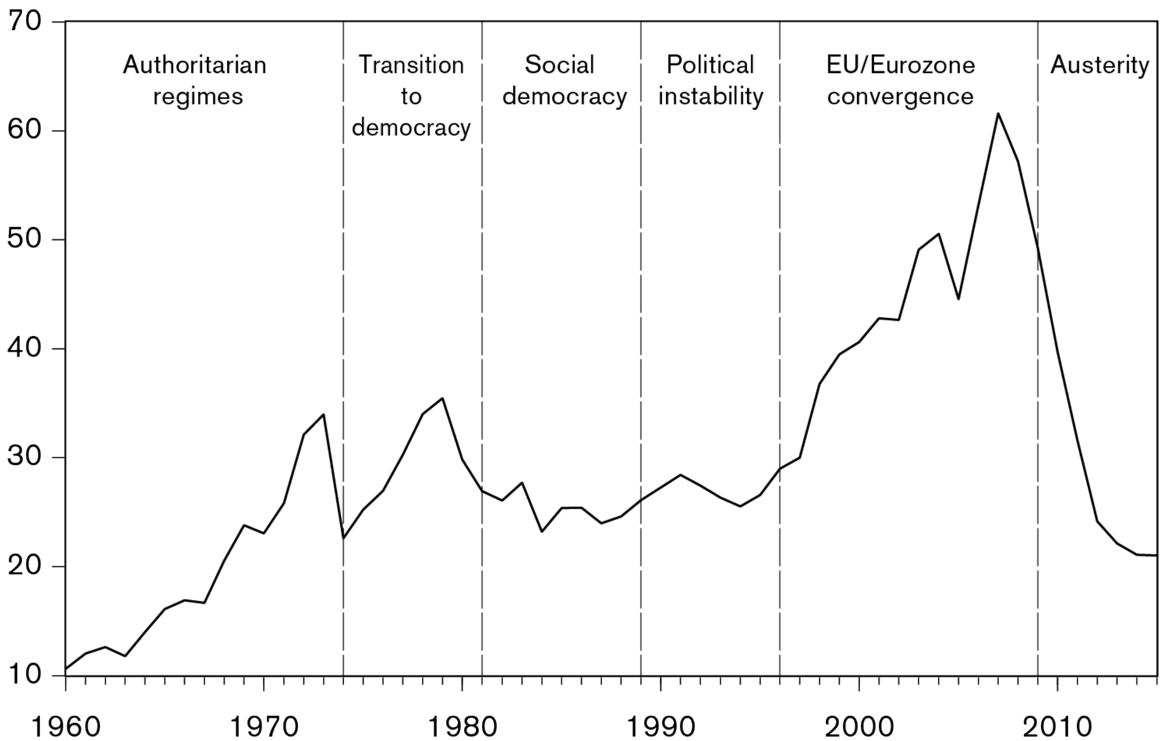
[4] Five elections took place over the period 1989-96, three of which were between June 1989 and April 1990. It is indicative of the political and institutional instability of this era that the Greek Communist Party (KKE) participated in coalition governments with New Democracy, the traditional Greek conservative party.

[5] It is worth noting that the mid-1990s military crisis between Greece and Turkey provided an additional non-economic incentive for Greece to pursue further international integration for international security reasons.

construction boom resulting from the staging of the 2004 Olympic Games provided a complementary short-term boost in capital accumulation and employment.

In 2007, capital accumulation reached its peak. At this turning point, accumulation initially dropped due to the global financial crisis and, subsequently, as a result of the austerity programmes imposed on the Greek economy from 2011 (Bilancetti 2019; Flassbeck and Lapavitsas 2015, pp. 142-3). The global financial crisis increased the uncertainty in international financial markets, which resulted in higher interest rates. Therefore, several heavily indebted economies like Greece faced debt repayment issues. The internal devaluation policy response to the public debt accumulation crisis imposed by the European troika was meant to halt the economic slump via a wage-squeeze-induced improvement in international price competitiveness (Talani 2016). However, adopting such supply-side policies in a period of increased uncertainty induced a decline in the domestic propensity to consume, which further contributed to the collapse of the Greek neoliberal SSA. Inevitably, after an acute decline until 2014, capital accumulation stagnated at approximately the level of 1968.

Figure 1: Gross fixed capital formation – Greece, 1960-2015

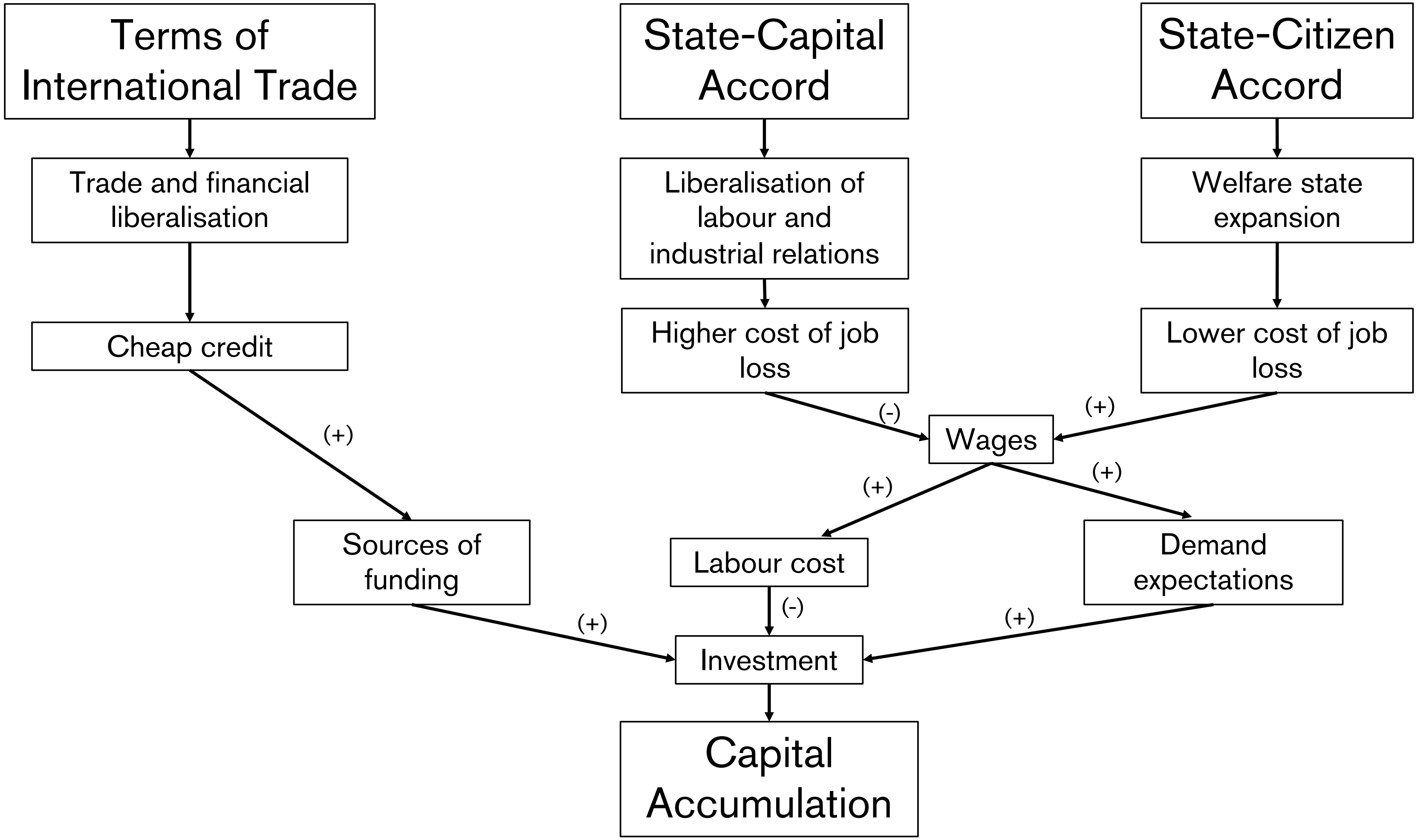


(EUR bn, at 2010 prices: total economy; source: AMECO)

To summarise, our analysis highlights that Greek neoliberalisation has indeed been a path-dependent process within the interconnected neoliberal institutional set-up of the EU. We argue that the Greek variant of the neoliberal SSA relied upon three main pillars: (i) The terms of international trade and finance accord, which included the liberalisation of trade, capital mobility and finance under the convergence agreements with the EU and the Eurozone members; (ii) The state-capital accord, which comprised the liberalisation of labour market institutions and industrial relations as a means of suppressing wages; and (iii) The state-citizen accord, which contained the expansion of the welfare state, aiming to counterbalance the social costs of the supply-side effects of the state-capital accord. Regarding the capital-labour accord, given Greek workers' historical distrust of their trade unions due to their strong partisan preferences, we claim that Greek capitalists and workers never established a proper channel of negotiation. Ergo, this accord has not been part of the Greek neoliberal SSA. This argument is consistent with McIntyre and Hillard (2013), who demonstrate that industrial peace was imposed by capital and not the result of mutual compromises, even in the US during Fordism. We choose not to extend beyond 2015, as this will require a thorough discussion of the rise and failure of the first Greek radical left administration to establish a new pro-labour SSA within the EU.

Figure 2 categorises the institutional complementarities of the Greek neoliberal SSA and outlines the channels through which they affected capital accumulation. A theoretical innovation of our depiction of the Greek neoliberal SSA is that we introduce explicitly the impact of demand expectations on investment and capital accumulation. This generalisation shows that the SSA approach can go beyond the classical Marxian profit-led demand regime assumption, and can be useful for the analysis of both profit- and wage-led demand regimes.

Figure 2: The Greek neoliberal SSA



4. Econometric design

Building on the historical analysis of the previous section, this section estimates the determinants of capital accumulation (ACCUM) in Greece over the period 1980-2014 using annual macroeconomic data. To test our core hypotheses, we use a range of proxies for the main pillars of the Greek neoliberal SSA.

Regarding the terms of international trade accord, we incorporate data for the terms of trade (TOT), i.e. the ratio between the index of export prices and the index of import prices, from the OECD. An improvement in the terms of trade, ceteris paribus, positively affects accumulation, since cheaper capital imports reduce production costs. Concerning the state-capital accord, we use the tax rate on corporate profits (CTAX) from the OECD. This proxy reflects the intention of the state to distribute the tax burden evenly within society, decreasing profitability and, thus, accumulation. As regards the state-citizen accord, we include public social spending (SOCIAL) from the OECD. An increase in social expenditures generates a twofold, contradictory impact on accumulation. On the one hand, the income transfers increase consumption, due to workers' higher propensity to consume, and, thus, increase aggregate demand. On the other hand, state subsidies reduce the cost of job loss and, consequently, empower labour and increase labour costs. Finally, we include the wage share variable (WS), using series from AMECO. The wage share is related to both the state-citizen and the state-capital accords since it is determined by the labour and industrial relations. As the wage share is part of the cost of production and, simultaneously, a source of demand through consumption, its effect on accumulation is ambiguous.

Our regression analysis relies on the unrestricted Error-Correction Model (UECM) that includes both the short-run (first-differenced) and the long-run (level) effects of the explanatory variables (Sargan 1964; Davidson et al. 1978). Aiming to avoid simultaneity biases, we follow the common practice in the literature and incorporate the long-run coefficients in first lags. We choose this parametrisation of the standard ECM model since it can efficiently yield estimates of potential cointegrating relations between variables which are either I(0) or I(1), eliminating potential serial correlation issues of the standard OLS model.

There are two prerequisites to use this model: (a) all variables must be either I(0) or I(1); (b) a long-run cointegrating relationship among the dependent and the explanatory variables must exist. As reported in Table 1, all variables are indeed I(1).

Table 1. Augmented Dickey-Fuller tests

	ACCUM	*CTAX*	*WS*	*TOT*	*SOCIAL*	*UBEN*	*KOF*	*TRADE*	*FINST*	*UTIL*
ADF levels	0.49	0.63	0.06	0.74	0.99	0.99	0.98	0.98	0.59	**0.55**
ADF 1st diff.	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	**0.00**

Notes: P-values are reported. The null hypothesis is that a unit root is present in the series.

To explore the existence of a long-run cointegrating relationship among the dependent and independent variables, we estimate a stationary regression in levels and test the stationarity of its residuals. We find that the residuals of the stationary regression are I(0). Thus, a long-run relationship exists and the UECM is applicable. As our study focuses on long-run institutional relationships over 34 years, our focal point is the long-run coefficients that reflect the structural processes, rather than the short-term adjustments. Our baseline econometric specification is the following:

$$\Delta(ACCUM) = \beta_0 + \beta_1 ACCUM_{t-1} + \beta_2 CTAX_{t-1} + \beta_3 WS_{t-1} + \beta_4 TOT_{t-1} + \beta_5 SOCIAL_{t-1} + \sum_{n=0}^{N} \gamma_n \Delta z + u_t$$

Where vector z includes the short-run (first-differenced) coefficients of the explanatory variables and the growth rate ($GROWTH$) as a control variable for the cyclicality of capital accumulation, and u_t is the error term.

To evaluate the robustness of our baseline results, we estimate five additional specifications in which we include other relevant proxies. In specification (2), we replace $SOCIAL$ with unemployment benefits ($UBEN$), i.e. public unemployment spending from the OECD, as a proxy that depicts more accurately state intervention that decreases directly the cost of job loss making the labour market tighter. Hence, we expect a negative effect on accumulation. In specification (3), we replace TOT with the KOF Globalization Index (KOF) from the KOF Swiss Economic Institute as an institutional control variable that measures the economic, social and political dimensions of globalisation. Since neoliberal globalisation has promoted a pro-capital policy agenda, we expect KOF to cause increases in accumulation. In specification (4), we replace TOT with $TRADE$, which is the sum of real exports and imports (source: AMECO). $TRADE$ is included as a proxy for the size of the foreign sector, i.e. trade openness. In specification (5), we extend the baseline specification by adding the Financial Institutions Index ($FINST$) from the IMF as a proxy for the liberalisation of international and domestic financial institutions. Since financial liberalisation has benefited capital disproportionately in the context of EU integration, we anticipate a positive effect on accumulation. In specification (6), we incorporate the capacity utilisation rate ($UTIL$) into the baseline specification as a technical variable that represents the degree of use of the means of production.

5. Econometric results and discussion

Our econometric results are shown in table 2. In specification (1) the long-run coefficients of TOT and $SOCIAL$ are both statistically significant at the ten per cent and one per cent levels respectively, and have the expected signs: positive for TOT and negative for $SOCIAL$. Regarding TOT, it exhibits a similar short-run effect, which is statistically significant at the five per cent level. The long-run coefficient of WS is statistically significant at the ten per cent level and its sign is positive. In specification (2) the long-run coefficients of TOT, $UBEN$ and WS are statistically significant at the five, one and ten per cent levels, respectively. TOT and WS have positive effects on $ACCUM$, whereas $UBEN$ exerts the expected negative effect. In specification (3) the long-run coefficients of $SOCIAL$ and KOF are both statistically significant at the five per cent level and exhibit the anticipated signs. The effect of $SOCIAL$ on $ACCUM$ is negative, while the effect of KOF is positive. The coefficient of WS is positive and statistically significant at the ten per cent level. Furthermore, the short-run effect of $SOCIAL$ is positive as well and statistically significant at the ten per cent level. In specification (4) both the long-run and short-run coefficients of $SOCIAL$ and $TRADE$ are statistically significant at the one per cent and five per cent level, respectively. As in the baseline specification, $SOCIAL$ exerts a negative long-run effect on $ACCUM$, while the long-run coefficient of $TRADE$ has the expected positive sign. In specification (5) the long-run coefficient of TOT is statistically significant at the five per cent level, while the long-run coefficients of $FINST$ and $CTAX$ are significant at the ten per cent level. As expected, TOT and $FINST$ are found to increase $ACCUM$. $SOCIAL$ decreases $ACCUM$, with its long-run coefficient being statistically significant at the one per cent level. Finally, in specification (6) the long-run coefficients of TOT and $UTIL$ are both positive and statistically significant at the one per cent level. Interestingly, the results are similar in the short-run, both in terms of signs and statistical significance.

Taking into consideration our econometric findings, we may conclude that our historical analysis finds robust quantitative support. The post-estimation diagnostics offer solid evidence for the statistical robustness of our findings, unanimously indicating the absence of serial correlation or heteroscedasticity issues in all six specifications. All variables related to the terms of international trade accord are robust, having a positive effect on accumulation. This shows that accumulation was indeed fostered by the trade liberalisation and capital mobility in the context of the EU institutions. The EU common market offered a broader market for the (few) export-oriented Greek firms, while EU integration reduced the volatility of the terms of trade and enhanced capital mobility, benefiting both the domestic and the foreign capital. The *KOF* Index that incorporates different dimensions of economic, political and financial globalisation is also statistically significant. This suggests that the EU-induced economic liberalisation, along with the democratic deficit of its institutions, fostered the unsustainable Greek growth model of the neoliberal period. The liberalisation of financial institutions also has significant explanatory power. This finding underlines that the EU interbank market proliferated capital mobility, providing credit to the Greek banking system, which boosted capital accumulation by financing either investment or consumption.

Focusing on the domestic level, the effects of public social spending and unemployment benefits are robust and exhibit negative effects on accumulation. This result highlights that the mild expansion of the Greek welfare state did indeed limit the negative impact of economic liberalisation on labour's income. In contrast, the effect of the wage share is positive and statistically significant in three out of the six specifications. In this respect, demand has an indirect positive effect on capital accumulation by enhancing investors' expectations about future sales. From an economic policy perspective, this is of great importance as it points out that internal devaluation does not only harm social cohesion, but is also an inefficient macroeconomic policy tool. Nonetheless, it is odd that welfare spending and the wage share exert opposite effects, since, theoretically, social spending empowers labour. To rule out the possibility of multicollinearity biases, we estimate the correlation among the variables. We find that the correlation between WS and $SOCIAL$ is 0.145, while the correlation between WS and $UBEN$ is 0.185. Both values are very low in terms of raising concerns about multicollinearity. An economic explanation is that weak collective bargaining institutions weaken the positive effect of welfare spending on real wages, i.e. the decrease in the cost of job loss empowers workers at the individual level, but this is not reflected in higher collective bargaining power.

Overall, given that the reported coefficients are standardised and thus comparable, it is important to note that the long-run effects of the explanatory variables that proxy trade, economic and political liberalisation prevail over the rest in four out of the six specifications. This fact underscores the crucial role of international EU-based institutional complementarities for the unsustainable growth path of the Greek economy in the neoliberal era.

Table 2. Econometric results

	(1)	(2)	(3)	(4)	(5)	(6)
Long-run effects						
ACCUM(-1)	-0.442	-0.694*	-0.861*	-1.671***	-0.778	-0.361
CTAX(-1)	0.432	0.177	0.249	0.331	0.582*	-0.139
WS(-1)	0.400*	0.375*	0.575*	0.249	0.037	0.314
TOT(-1)	0.752*	1.010**			1.256**	1.002***
SOCIAL(-1)	-0.822***		-1.716**	-2.167***	-1.499***	-0.197
UBEN(-1)		-0.745***				
KOF(-1)			1.908**			
TRADE(-1)				2.876***		
FINST(-1)					0.740*	
UTIL(-1)						0.813***
Short-run effects						
Δ(ACCUM(-1))	0.214	0.056	0.246	0.011	0.155	-0.071
Δ(GROWTH)	0.187	0.028	0.126	0.053	0.165	0.096
Δ(CTAX)	0.177	0.131	0.161	0.226	0.186	0.195
Δ(WS)	-0.146	-0.231	0.017	-0.142	-0.382*	0.019
Δ(TOT)	0.381**	0.420***			0.406**	0.369**
Δ(SOCIAL)	-0.188		-0.377*	-0.385**	-0.223	-0.045
Δ(UBEN)		-0.205				
Δ(KOF)			0.153			
Δ(TRADE)				0.380**		
Δ(FINST)					-0.026	
Δ(UTIL)						0.698***
R^2	0.63	0.74	0.61	0.74	0.68	0.85
BG	0.19	0.18	0.79	0.16	0.14	0.16
BPG	0.66	0.60	0.40	0.19	0.81	0.18
Obs	34	32	34	34	34	34

Notes: Statistical significance at 10%, 5% and 1% levels is denoted by *, ** and ***, respectively. The dependent variable is gross fixed capital formation ($ACCUM$) in first differences. The regression coefficients reported are standardised by multiplying the estimated coefficient obtained by the ratio of the standard deviation of the explanatory variable over the standard deviation of the dependent variable. Values for the Breusch-Godfrey (*BG*) serial correlation (null hypothesis: no serial correlation) and the Breusch-Pagan-Godfrey (*BPG*) heteroskedasticity tests (null hypothesis: no heteroscedasticity) are p-values corresponding to *Obs*R^2*. Constant terms are included, but not reported.

6. Conclusions

This paper analysed the rise and demise of the domestic and transnational social structures of the Greek neoliberal growth model. We argued that the Greek neoliberal SSA was primarily based on the international institutional complementarities that have been formed under the EU convergence agreements, including trade and financial liberalisation, enhanced capital mobility and the liberalisation of labour relations. On the domestic level, the rise in welfare spending before the crisis counterbalanced—to some extent—labour's loss of bargaining power. Therefore, the rising uncertainty in international financial markets after the 2008 crisis limited trade and capital flows, and triggered the onset of the crisis for the indebted European South. The EU-imposed internal devaluation policies not only failed to revitalise the Greek SSA, but also induced a further fall in domestic demand, which caused investors' confidence to deteriorate. Our econometric findings provide quantitative evidence that trade openness, the liberalisation of international financial institutions, welfare spending and the wage share have been the key drivers of capital accumulation in Greece since 1980. It is particularly interesting that demand expectations matter, since the wage share increases accumulation. This possibly implies that the domestic demand regime is wage-led.

Ultimately, our analysis pinpoints that the Greek neoliberal model has indeed been a path-dependent process within the interconnected core-periphery EU institutional environment. As Greece transitioned directly from autocratic regimes to neoliberalism, the causes of its crisis have been fundamentally different from the Anglo-Saxon and continental European experience. Thus, a sustainable way out of the current crisis requires reforms at both the domestic and international levels towards a state-regulated inclusive growth model, including a proper fiscal union with surplus recycling mechanisms (Hancké, 2013). However, is it politically realistic to expect such an institutional shift at either the national or EU level? Future research should address this question by examining the rise and fall of Syriza between 2015 and 2019, and the subsequent reincarnation of the Greek right.

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Gower Street, London, WC1E 6BT

General enquiries:
iipp-research@ucl.ac.uk
Tel: +44 (0)20 3108 6961