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Rebalancing Balanced Growth:

The Evolution of the Swedish Growth Model since the mid-1990s

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This chapter explores the evolution of the Swedish growth model over the last three decades. Relative to Baccaro and Pontusson (2016), we seek to go beyond an analysis based on growth accounting and to qualify the characterization of Sweden as exemplifying a "balanced growth model." What distinguishes the Swedish experience from the German experience prior to the Great Recession of 2008-09, we will argue in what follows, is not that exports and domestic consumption were co-equal demand drivers of growth in Sweden while exports alone drove growth in Germany: exports led in both cases, but export-led growth generated more consumption growth than in Sweden than in Germany and thus boosted growth of import-competing and sheltered services. It is in this specific sense that the Swedish growth model of 1994-2007 can be characterized as "balanced" (and as a continuation of the Swedish growth model of the 1980s).

With this reformulation as our point of departure, we will proceed to explore how Swedish growth dynamics since the Great Recession differ from the growth dynamics of the pre-crisis period. Extending the analysis of Baccaro and Pontusson (2021), we demonstrate that a shift from foreign demand to domestic consumption as the primary demand driver of economic growth occurred in the wake of the Great Recession. The 2010s are also distinguished from the pre-crisis period by the increased importance of credit-financed consumption. At the same time, we emphasize that the Swedish economy remains highly trade dependent and that export-oriented manufacturing firms remain economically important and politically influential. The Swedish growth model is still a balanced growth model, but the balance is different from what it used to be. To capture this shift, we refer to Sweden in 1994-2007 as an "export-led balanced growth model" and Sweden in the 2010s as a "consumption-led balanced growth model."

Our Swedish case study makes several analytical contributions to the growth-models perspective set out in the introductory chapter of this volume. As articulated in the introductory chapter (and in previous work by the editors), the growth-models perspective draws inspiration from the distinction between wage-led and profit-led growth commonly made by heterodox economists (e.g., Palley 2017 and Lavoie 2017), but effectively replaces the distinction between wage-led and profit-led growth with the distinction between consumption-led and export-led growth. In this chapter, we propose to bring the distinction between wage-led and profit-led growth back to centerstage and to treat it as conceptually distinct from the growth contributions of different components of aggregate demand. Our case study illustrates how the relationship between profits and components of aggregate demand can be explored empirically and some of the potential insights generated by doing so.

Relatedly, we want to suggest that insights might be gained by applying the distinction between profit-led and wage-led growth in a more disaggregated way than what is common among heterodox economists. Ignoring public services, our analysis distinguishes three aggregate sectors of the Swedish business: manufacturing, exposed services and sheltered services. As we shall see, growth in (export-oriented) manufacturing has clearly been profit-led while growth in sheltered services has been wage-led and growth in exposed services cannot be so easily categorized as either profit-led or wage-led. The distinction between manufacturing and sheltered services holds for each of the time periods covered by our analysis. What distinguishes the post-crisis period (the 2010s) from pre-crisis period (1994-2007) is the relative importance of the three sectors and the dynamic links between them.

Yet another analytical contribution that we seek to make is to bring productivity growth back into the picture. Baccaro and Pontusson's (2016) emphasis on the demand-side of growth model was meant as corrective to the supply-side emphasis of the varieties-of-capitalism and the authors stated clearly that striking a better balance between demand- and supply-side considerations should be the long-term

objective (pp. 27-18). Moving in this direction, our Swedish case study seeks to illustrate how productivity growth affects macroeconomic dynamics.

In terms of methodology as well as substantive argumentation, our analysis of the Swedish growth model and its evolution over the period 1994-2020 combines Baccaro and Pontusson's (2016, 2021) emphasis on balance between domestic and foreign demand drivers with Erixon's (2011) emphasis on the leading role of export-oriented manufacturing firms and the importance of productivity growth. In due course, we will also engage with the contention by Belfrage and Kallifatides (2018) that Sweden transitioned to a "finance-dominated growth model" in the time period covered by our analysis. Akin to the perspective advanced by Ban and Helgadottír in this volume, we argue that the concept of "financialization" captures important long-term developments that predate the shift from export-led to consumption-led growth and that financial logic has not, at least not yet, displaced profit-making through the production (and export) of goods and services as the core logic of the Swedish growth model.

The rest of the chapter is organized as follows. We will begin with the briefest possible introduction to the Swedish case. Against this background, we will devote separate sections to economic growth dynamics in 1994-2007 and 2010-19, conceived in terms demand drivers and the role of corporate profits, with the over-time comparison featuring prominently in the second section. In subsequent sections, we will address productivity growth and financialization across both time periods. Finally, we will briefly sketch an account of the politics of managing and adjusting the Swedish growth model.

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¹ A similar line of argument is advanced by Buendia and Rey-Araújo (2021). In contrast to our analysis, these authors emphasize the transformative role of neo-liberal reforms in the early 1990s and downplay the impact of the Great Recession on the Swedish growth model.

The Swedish case

Taking off in the last quarter of the 19th century, Swedish industrialization was fundamentally export-led. In the first instance, industrialization involved processing of wood and iron and exporting paper, pulp and steel, but a number of innovative engineering firms exporting capital goods also emerged in this period (notably Atlas-Copco, Alfa-Laval and Ericsson). The Swedish Social Democrats consolidated political power in the 1930s by striking a deal with the Agrarian Party, with the latter supporting proto-Keynesian recovery measures in return for agricultural tariffs (Gourevitch 1986). This deal catered to the interests of domestic industries and was initially resisted by the export-oriented industries. However, the class compromise in the 1930s encompassed a second deal as well, the Saltsjöbaden industrial peace agreement of 1938, of which export-oriented employers were very much a part. As emphasized by Swenson (2002), the Saltsjöbaden agreement institutionalized cooperation between the LO (the confederation of blue-collar unions) and export-oriented employer associations to keep wage growth in construction and other sheltered sectors under control. The breakthrough of Swedish Social Democracy in the 1930s hinged on the co-existence of these two, quite distinct, cross-class alliances.

The 1940s and the 1950s saw the rise of a new "fraction of capital:" engineering firms, like Volvo and Electrolux, producing consumer durables by Fordist methods (Erixon 1997). Accounting for a rapidly growing share of value-added, this group of firms came to occupy a pivotal position bridging the traditional divide between export-oriented and home-market industries. Benefitting from the sustained boost of both domestic and foreign household consumption in the post-war era, Fordist mass producers were uniquely able to generate rapid productivity growth by scale advantages and the vitalizing role of international competition. Strong labor contributed to the productivity-enhancing reduction of profit margins in the open sector, especially by the blue-collar unions' pursuit of solidaristic wage policy from the early 1960s onwards. Consistent with the logic the Regulation School's interpretation of the *trentes*

glorieuses (e.g., Boyer and Saillard 2004), Fordist mass producers were the natural business ally of postwar social democracy in Sweden.

As documented by Erixon (1984 and 1997) and Pontusson (1992a), the growing importance of export markets and foreign investment by the large Swedish engineering firms c rendered the politics of class compromise increasingly fraught from the late 1960s onwards. The Fordist growth engine ground to a halt while several traditional export industries linked to raw materials—steel and shipbuilding in particular—turned into "declining industries" in the context of the OECD-wide downturns of the 1970s. Volvo and other Fordist mass producers experimented with new, more flexible, production strategies in 1980s (Swenson and Pontusson 1996), but the recovery strategy adopted by the new Social Democratic government of 1982 was based on regaining cost competitiveness through a massive devaluation supported by voluntary wage restraint and tight fiscal policies (Erixon 1989, Pontusson 1992b). The Social Democrats also implemented an extensive program of financial deregulation in the second half of the 1980s (Blyth 2012: ch.7). While the new macroeconomic policy paradigm of the 1980s contributed to sluggish productivity growth by reducing the pressure on firms to innovate, financial deregulation generated speculative bubbles in real estate as well as financial assets and thus set the stage for a financial crisis in the context of the OECD-wide recession of the early 1990s. Largely due to policy choices in the 1980s, the early 1990s recession was deeper and longer in Sweden than in any other OECD country but Finland. With real GDP contracting for three consecutive years (1991-93), the crisis of the early 1990s was worse for Sweden than crisis of the early 1930s (Edvinsson 2005: 253 and 262).

Export-led growth in 1994-2007

Except for a brief and shallow recession in 2001-02, the Swedish economy grew at a steady and very healthy pace from 1994 until the Great Recession of 2008-09. Over the period 1995-2007, Swedish GDP growth averaged 3.3% per year, roughly twice the rate of German GDP growth. Only a handful of long-standing OECD member states—Australia, Finland, Iceland, Ireland, South Korea and Spain—performed better than Sweden by this measure. The Swedish recovery from the crisis of the early 1990s was export-led in much the same way as the previous recoveries (Erixon 2015a). Having dropped in the second half of the 1980s, the export share of GDP increased from 26.0% in 1992 to an all-time high of 49.8% in 2008. Among West European countries, only Finland and Ireland exceeded the growth of exports registered by Sweden in the second half of the 1990s. Though falling behind Germany, the growth rate of Swedish exports remained impressive in the 2000s. From 1997 onwards, Sweden also stands out as one of the OECD countries with the highest rates of household consumption growth. As reported by Baccaro and Pontusson (2016), domestic demand contributed significantly more to economic growth in Sweden than in Germany, and significantly less than in the UK, over the period 1994-2007.²

Figures 1 and 2 present our own estimates of gross profit shares over the period 1993-2018, with the gross profit share defined as gross profits (depreciation plus net profits) in percent of gross value-added at constant factor prices. While Figure 1 shows the evolution of the gross profit share for the business sector as a whole and for manufacturing and mining, Figure 2 decomposes the business sector into manufacturing (plus mining), exposed services and sheltered services.³ Table 1 in turn tracks the

² This also holds for the import-adjusted estimates presented in Baccaro and Höpner's chapter in this volume.

³ Our coding of services as "exposed" or "sheltered" is based on the regional concentration of different service industries as reported by Eliasson and Hansson (2016). By our specification of the cut-off between exposed and sheltered service sectors, "exposed services" include transport and storage (H49 – H53), edition, film, video and TV (J58-J60), tele-communications (J61), information technology (J62-J63), financial and insurance activities (K64-K66), business administration (M69-M70), scientific and technical activities (M71-M72), advertising and marketing (M73)

allocation of total value-added across these aggregate sectors from 1993 to 2018. As indicated at the outset, our objectives here are two-fold. First, we want to insist on the conceptual distinction export-led and profit-led growth. Secondly, we want to underscore the importance of sectors not only for the distinction between export-led and consumption-led growth, but also for the distinction between profit-led and wage-led growth.

[Figures 1-2, Table 1]

Setting the post-crisis period aside for the time being, the gross profit share in the Swedish business sector declined from about 54% in 1995 to less 46% in 2002 and then recovered somewhat in 2003-06 (reaching 51% in 2006). Based on data for all business, economic growth in the period from 1994 to 2007 can hardly be characterized as profit-led, but it is immediately clear from theses figure that sectoral differences matter. The decline in the overall profit share over this period turns out to be entirely attributable to two factors: first, a steady decline of the profit share in services, especially sheltered services; and, secondly, an increase in exposed services' share of total value-added (with tradeable services being characterized by a lower profit share than either sheltered services or manufacturing and mining). The manufacturing recovery in the second half of the 1990s was preceded by a sharp increase in the profit share and, in this part of the Swedish economy, the profit share was by historic standards very high and very stable over the entire period from 1995 to 2006.⁴

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and other business activities (M74-M75). "Sheltered services" in turn include electricity, gas and water supply (D35-E39), construction (F41-F43), wholesale and retail trade (G45 – G47), accommodation and food service activities (I55-I56), dwellings (L68A), other real estate activities (L68B), administrative and support service activities (N77-N82), education (P85), art, entertainment and recreation (R90-R93), human health (Q86) and social work activities (Q87-Q88). Note that the analysis presented here fails to take account of over-time changes in these (sub-) sectors' exposure to international competition.

⁴ See Erixon (1987:47) and Bengtsson (2014:298) on the evolution of the profit share over a more extended period of time.

As in the early 1980s, currency depreciation played a key role in the mid-1990s to increase the profits share in the manufacturing sector. In this instance, the falling value of the krona was the response by the financial market to the government's decision to switch to a flexible exchange-rate regime in late 1992. The krona then appreciated in 1995-1996, but deteriorated again in 1996-2001 as the prime rate by the Central Bank, governed by an inflation target from 1995 onwards, reduced interest rates and global speculative dynamics (unrelated to the competiveness of Swedish companies) became an increasingly important determinant of exchange-rate movements (Alexius and Post 2008). "Traditional" Swedish exporters of automobiles, investment goods and raw materials -products mostly classified as low- or medium-tech—benefitted from the sustained currency depreciation of the 1990s, but also from high foreign demand and rising world-market prices for their products.⁵ In large measure, the profits boom enjoyed by Swedish raw-materials producers and manufacturing firms in the 1990s and again in 2004-06 should arguably be seen as endogenous to the growth of exports, as distinct from rising profitability leading to increased competitiveness via increased investment (cf. Skott 2015). The strongly pro-cyclical movement of the profit share in manufacturing and mining underscores this point, suggesting that the gross profit share in this part of the economy can largely be explained by fluctuations in world-market prices.

The key role of the ICT sector in the export-led recovery of the second half of the 1990s deserves to be noted in this context. Linking manufacturing (computer equipment) and services (information technology and tele-communications), the ICT sector as a whole and especially the tele-products segment, in which *Ericsson* acted as a spider in a strategic industrial network, was characterized by large technological opportunities and by fierce struggles for market shares and, as a result, these firms experienced only a modest increase in their profit share in the second half of the 1990s (Erixon 2011: 309-

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⁵ The Swedish Crown strengthened in relation to the US dollar in 2001-2008, prompting a small rise in relative unit wage costs, but this did not prevent a second exports and profits boom starting with the 2001-02 recession.

311). More broadly, it is noteworthy that the service sector's share of Swedish exports increased from about 18 percent in the mid-1990s to 22 percent on the eve of the Great Recession even though the profit share in exposed services did not rise over this period.⁶ On these grounds, "export-led" is arguably a better label for the Swedish growth model of 1994-2007 than "profit-led."

The diversification of exports through the expansion of high-tech manufacturing and a range of IT and business services distinguishes the Swedish experience of 1994-2007 from that of the 1980s. To some extent, the expansion of new, more knowledge-intensive, exports also distinguishes the Swedish experience from that of Germany in the period 1994-2007. As suggested above, however, the key contrast between Sweden and Germany has to do with the fact that export-led growth generated much more household consumption in Sweden than in Germany and thus more rapid growth of services catering primarily to domestic demand. As shown in Table 1, sheltered services' share of total value-added decline slightly from 1995 to 2005, but this was entirely a result of growth in sheltered services lagging behind growth in exposed services. Firms in sheltered services actually grew their value-added more rapidly than manufacturing firms. Critically for our purposes, this occurred despite a big decline in the profit share in sheltered services from 1994 to the early 2000s (see Figure 2).

In the sheltered sector of the economy, accounting for about 45 percent of total business value-added, the growth process in this period must be characterized as wage-led. Crudely put, profits share of value added fell, but profits (and employment) rose by virtue of more output being produced in response to the demand created by wage growth. Profit-led growth in manufacturing and wage-led growth in sheltered services arguably complemented each other in the sense that the former generated initial recoveries, in 1994-96 and 2003-04, while the latter boosted growth in later phase of each cycle (1999-

⁶ While finance and insurance only accounted for 7.1 percent of Swedish service exports in 2013-16, IT services accounted for 20.8 percent of Swedish service exports and "business services" for another 25.9 percent. The remaining categories worthy of notes are transport (26.8 percent), travel (15.8 percent) and intellectual property (11.1 percent). Source: OECD Database on Trade in Services.

2000 and 2007-08). The decline in the overall profit share in the business sector over the 1995-2005 period turns out to be entirely attributable to two factors: first, a steady decline of the profit share in services, especially sheltered services; and secondly, an increase in exposed services' share of total value added (with tradeable services being characterized by a lower profit share than either sheltered services or manufacturing and mining).

As suggested by Baccaro and Pontusson (2016), the coupling of export-led growth with consumption growth in the Swedish case, and the contrast with Germany in this respect, can at least partly be explained in terms of wage formation dynamics. It is generally accepted that the Swedish system of peal-level wage bargaining collapsed in the 1980s and that a new system of "pattern bargaining," coordinated via centralized mediation, was institutionalized in the 1990s (see, e.g., Baccaro and Howell 2017: ch.8). Formally speaking, this system resembles the German system of pattern bargaining in that it allows for collective bargaining at the firm level and, indeed, for bargaining between firms and individual employees. Also, both systems are premised on the idea of "wage moderation" by the manufacturing sector, considered to be the core of the exposed sector of the economy. In the Swedish case, this principle has taken been taken to mean that wage growth in the Swedish economy should not exceed wage growth in the Eurozone as a whole, the so-called "Europe norm" (Europanormen) (Erixon 2021).

For all the formal similarities between the two bargaining systems, wage developments in Sweden and Germany diverged sharply in 1994-2007. We suggest that the pattern-bargaining system made the export multiplier stronger in Sweden than in Germany. In the Swedish case, coordinated wage bargaining not only involved the exercise of wage restraint by workers in exposed sectors of the economy, but also the diffusion of wage increases in exposed sectors to sheltered sectors (Westermark 2019). In Germany, by contrast, more rigorous wage restraint in exposed sectors—in the first instance, manufacturing—was facilitated by the decoupling between exposed- and sheltered-sector wages, with latter falling

dramatically behind (see Baccaro and Pontusson 2016: 24-25). As workers in sheltered services tend to be less skilled and less well paid, low-end earnings inequality increased significantly less in Sweden than in Germany over this period. Not only was the average rate of wage growth faster in Sweden, but low-end Swedish wages grew particularly fast by comparison to low-end German wages.⁷ To the extent that low-income households consume more of their income than high-income households, the more egalitarian profile of Swedish wage growth arguably contributed to the divergence between Swedish and German consumption growth.

Again following Baccaro and Pontusson (2016), divergent wage developments between Sweden and Germany can at least partly be attributed to differences in union strength and the size of the public sector. Sweden's powerful public-sector unions were more able to ensure that the wages of their members would keep up with wages in manufacturing and exposed services than their German counterparts and public-sector wages for low-skill workers in turn set a floor for wages of low-skill workers in private services.

The Swedish experience of 1994-2007 highlights a feature that the literature on coordinated wage bargaining has tended to ignore, namely that coordinated bargaining with exposed-sector leadership sometimes serves not only as a mechanism of wage restraint, promoting export/profit-led growth, but also as a mechanism of wage-growth diffusion, promoting consumption/wage-led growth. As suggested by the Swedish case, whether or not coordinated wage bargaining takes on this dual role arguably depends on power relations more than formal institutional arrangements. In addition, we want to

⁷ From 1998 to 2007, average hourly earnings in the private sector grew at an annual rate of 3.1% in Sweden and 2.1% in Germany (OECD Main Economic Indicators). From 1994 to 2007, the Swedish 50-10 earnings ratio rose by 4.8% (from 1.25 to 1.31) while the German 50-10 ratio rose from by 12.2% (from 1.63 to 1.83). Sources: OECD Main Economic Indicators and Relative Earnings Database.

⁸ In 2011, public-sector union density in Sweden was 83 percent compared to 27 percent in Germany. In Sweden, private-sector density was 65 percent and public-sector employees accounted for 42 percent of all union members. In Germany, private-sector density was 16 percent and public-sector employees accounting for 37 percent of all union members. Source: Visser (2019).

emphasize that wage growth-diffusion occurs not only through collective bargaining but also through market mechanisms, including consumer demand generated by earnings in export sectors as well as competition for labor across different sectors of the economy.

Consumption-led growth in the 2010s

By comparison to the crisis of the early 1990s (and the crises of the 1970s), the economic downturn triggered by the global financial crisis of 2007-08 was very sharp but also short-lived in Sweden, much like Germany and other Northern European countries. Swedish GDP contracted by 0.5 percent in 2008 and by a whopping 4.3 percent in 2009. GDP grew by 6.0 percent in 2010, but this spectacular recovery also proved short-lived: over the period 2008-2019, Sweden's annual GDP growth averaged 1.7 percent, roughly one and a half percentage point lower than the growth rate between 1995 and 2007. Also, Sweden's growth performance in 2008-2019 did no longer deviate significantly from that of other OECD countries. Relative Germany, Sweden's GDP growth was slightly higher and GDP-per-capita growth slightly lower.

The financial crisis and subsequent recession hit Sweden first and foremost by reducing global demand for the Swedish export products. The volume of exports fell by nearly 15 percent while employment in manufacturing and mining fell by 10 per cent in 2009. Export recovered sharply in 2010, but this recovery also proved short-lived as the UK as well as the Eurozone member states embraced austerity policies in 2010 and thereafter. Swedish export growth in the 2010s was slower than in previous recoveries, but only slightly slower than German export growth (4.2% as compared to 4.8% per year according to the OECD's Economic Outlook 2020, Statistical Annex, Table 18).

As in the 1990s, the economy recovery of Sweden from 2010 onwards followed in the wake of a sharp depreciation of the value of the *krona* and a restoration of the profit share in manufacturing. The depreciation of 2008-09 was neutralized by appreciation in 2010-13, but a further depreciation in relation to the US dollar—comparable to that of 1996-2001 in duration and magnitude (33 percent as compared to 40 percent)—followed in 2014-19. As a result, the profit share in manufacturing remained high, by historic standards, for most of the decade (see Figures 1-2 above). In contrast to 1994-2007, however, these favorable conditions for export-oriented business did not translate into export-led growth. Arguably, the exchange rate has become a less important determinant of export competitiveness as the share of knowledge-intensive services in total exports has increased and the reliance on global value chains has increased the share of imported inputs in manufacturing, but we do not observe the decoupling between the exchange rate and the profit share in exposed sectors that this argument would seem to imply. As suggested above, sluggish foreign demand appears to have been the main constraint on export-led growth in the 2010s.

There was an important shift in the relative balance between foreign and domestic drivers of Swedish GDP growth in the aftermath of the Great Recession. Falling from all-time high of 49.8 percent in 2008 to 44.5 percent in 2009 (current prices), the share of exports of goods and services in GDP fluctuated between 42 and 47 percent from 2009 through 2019 (OECD National Accounts Issue 2, 2016 and 2020). Similarly, the data on the sectoral composition of total value-added in the business sector presented in Table 1 bring out a clear contrast between the pre-crisis and post-crisis periods: while the share of value added by exposed services increased at the expense of sheltered services as well as manufacturing from 1995 to 2005, the share of value added by sheltered services increased at the expense of exposed services

as well as manufacturing from 2005 to 2018. It also deserves to be noted here that sectors conventionally characterized as "exposed" cater to domestic demand as well as foreign demand: this holds for manufacturing, but especially for "exposed services."

Relatedly, Figure 3 shows that investment in Swedish manufacturing fell behind investment in German manufacturing from 2008 onwards. By contrast, overall fixed capital investment by business increased much more in Sweden than in Germany over the course of the 2010s. With sheltered as well as exposed services being characterized by lower profit shares than manufacturing in the 2010s, classifying the Swedish growth model in this decade as "profit-led" would seem to be something of a stretch. At the same time, it is clearly the case that post-crisis period is distinguished from pre-crisis not only by lower GDP growth, but also by a declining profit share for the business sector as a whole.

[Figure 3]

The shift in Sweden, as in many other OECD countries, towards services in the 2010s was to a large extent policy-led. The Centre-Right coalition government avoided fiscal stimulus in 2008-09, but the large Swedish public sector mitigated the recession by strong automatic (built-in) stabilizers. Albeit committed to the public-surplus norm established in the 1997, the subsequent fiscal policy by the Centre-Right coalition became expansionary. The government was primarily guided by the efforts of the leading party, the Conservative *Moderata Samlingspartiet*, to increase labour supply by earned income tax deductions.¹⁰ The return of the Social Democrats to power in 2014 (in coalition with the Swedish Green

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⁹ By adjusting for imports, the decomposition of GDP growth by components of aggregate demand presented in Baccaro and Höpner's chapter in this volume obscures the post-crisis Swedish shift to consumption-led growth. Note also that Baccaro and Höpner's estimates fail to capture developments in the second half of the 2010s.

¹⁰ A commonly used measure of discretionary fiscal stimulus, the underlying primary government balance was reduced from 3.1 percent of potential GDP in 2009 to -0.1 percent in 2014. The underlying primary balance in Germany was the same in 2009 and 2014 (1.7 percent). Source: OECD Economic Outlook 106 database.

Party) meant a stricter application of the budgetary surplus norm (a public-debt-to-GDP anchor of 35% was adopted in 2019), but monetary policy compensated for the deflationary turn in fiscal policy (Leeper 2018). After a tightening of monetary policy in the early 2010s, motivated by the fear of a financial bubble, the *Riksbank* prioritized the fight against deflation from 2012 onwards. To reach its inflation target, the *Riksbank* launched quantitative-easing programs and reduced the repo rate. For the entire second half of the 2010s, the Swedish repo rate was effectively negative, boosting demand for government bonds and real estate but also consumer demand by reducing borrowing costs.

Private consumption was sustained by pattern bargaining in the 2010s. Despite the depreciation of the *krona*, real-wage growth in Sweden again exceeded that of most other OECD countries in the 2010s. As in the pre-crisis period, Swedish wage-bargaining dynamics served to diffuse wage growth from the manufacturing to other sectors of the economy and squeezed corporate profits in sectors characterized by limited mark-up opportunities and relatively low productivity growth.¹¹ In Western Europe, Sweden, Austria and Norway stand out as the three countries with the highest rates of nominal wage growth in the private sector in 2008-2019. Sweden and Norway also stand out having significantly higher rates of household consumption growth than most OECD countries in this period.

On an economy-wide basis, wage growth closely tracked productivity growth prior to the Great Recession. In the post-crisis period, by contrast, wage growth exceeded productivity growth by wide margin, suggesting a more important role for wage bargaining as a growth engine when exports and profits in the exposed sector (the ICT sector in particular) fall short. As already noted, however, monetary policy crucial role in sustained private consumption in the 2010s, with credit emerging as a source of finance for household expenditures on durable consumer goods. Let us briefly explore the dynamics of

¹¹ Relative to 1994-2007, the pace of overall earnings inequality growth decelerated in the 2010s, with the 90-10 ratios rising by .49% per year between 2010 and 2019, as compared to 1.01% between 1994 and 2007 (OECD Relative Earnings Database). See Erixon (2021) for a more extensive discussion of the macroeconomic role of wage formation in the 2010s.

productivity growth before and after the crisis of 2008-09 and then address the question of financialization.

Productivity growth

To motivate the discussion in this section, Table 2 provides an overview of Sweden's labor productivity performance over the period 1995-2019, with Germany, the UK and the US serving as comparative benchmarks. Measured across the entire corporate sector, Swedish labor productivity grew twice as fast German labor productivity between 1995 and 2007. Though the contrast is less stark, Sweden also outperformed the UK and the US (and indeed most other OECD countries) in terms of labor productivity growth over this period. Importantly, this holds for productivity growth in private services as well as manufacturing. Indeed, the biggest difference between Swedish and German productivity performance in the first half of the 2000s pertains to private services. What is most striking from a comparative perspective is the broad scope of productivity gains in Sweden in the decade before the crisis of 2008-09. Productivity growth in storage and transportation as well as wholesale and retail trade and hotels and restaurants was significantly higher in Sweden than in the US and the UK, let alone Germany, and productivity growth in the financial sector, including insurance companies, was also significantly higher than in Germany.

[Table 2]

The sharp deceleration of productivity growth across the OECD area in the wake of the Great Recession is consistent with the Kaldor-Verdoorn proposition that aggregate demand determines the rate of productivity growth via the use of scale advantages and the technological upgrading that new capital investment entails. In 1995-2007, Sweden outperformed most OECD countries with respect to both GDP and productivity growth and this, too, would seem to support the Kaldor-Verdoorn theorem. However, it

is far from obvious that GDP growth and productivity growth are consistently associated with each other across countries and time. It is noteworthy that British productivity growth was significantly slower than Swedish productivity growth despite very similar rates of GDP growth in 1995-2007. Also, Sweden combined sluggish productivity growth with robust GDP growth in the 1980s (Erixon 1989 and 2008) and productivity growth in the country did not pick up appreciably as GDP growth recovered in the 2010s.

ICT specialization is a common characteristic of many countries with high productivity growth in the pre-crisis period. According to Edquist (2009), the ICT sector alone accounted for nearly half of productivity growth in the Swedish corporate sector between 1995 and 2000 and the use of ICT in other sectors of the Swedish economy became an increasingly important source of productivity growth from the late 1990s onwards.

It is a commonplace to attribute Sweden's emergence as a leader in ICT adoption as well as in ICT innovation to its "national innovation system," as extended, and partly modified, by new government initiatives in the late 1980s and the 1990s (see, e.g., Ornston 2013 and Thelen 2019). The Swedish innovation system has long been characterized by high rates of R&D investment by corporations and public authorities and by extensive R&D collaboration between firms and between the corporate and public sectors. Dominated by large engineering firms and pharmaceutical firms, the innovation system used to be geared towards incremental innovation within well-established industries (Edquist and Lundvall 1993, Erixon 1997, Bitard et al. 2008). Already in the 1980s, Social Democratic governments introduced measures to promote radical innovation and venture capital and the Center-Right coalition government of 1991 extended such measures (Ornston 2013). Arguably, the deregulation of telecommunications and other public monopolies by the bourgeois parties also stimulated ICT innovation in a context characterized by public investment in infrastructure and public subsidization of corporate R&D expenditures (Bergh and Erlingsson 2009). Perhaps most importantly, governments in 1990s

dramatically increased spending on education, broadened access to tertiary education and undertook a range of measures to promote basic ICT competences as well as computer ownership and internet access for the population at large.¹² By stimulating domestic demand for ICT products and services, these measures boosted the earnings of Swedish ICT firms, but their main contribution to economic growth was to facilitate the introduction of productivity-enhancing ICT equipment and practices in other sectors of the economy.

As suggested by the literature on Nordic innovation systems, the larger institutional framework of public welfare provisions, active labour market programmes, employment protection and cooperative industrial relations contributed to pre-crisis productivity growth by facilitating employees' acceptance of changes in work organization and technology as well as more flexible employment contracts (Pontusson 2011). That said, the national-innovation-systems literature alone does not provide an adequate explanation of Swedish productivity growth, for there are no obvious institutional or policy changes that can invoked to explain the deceleration of corporate R&D expenditures and productivity growth in the wake of the economic crisis of 2008-09. The use of data-processing software continued to expand in the Swedish business sector in the 2010s, but the productivity-enhancing potential of ICT usage in many service sectors appears to have been exhausted (cf. Gordon 2014).

Following the logic of the Rehn-Meidner model, wage pressure can also be invoked to explain Sweden's strong productive performance prior to the crisis of 2008-09. While recognizing the need for wage restraint, Rehn and Meidner famously argued that wage solidarity, i.e., higher percentage increases for workers in low-wage industries and firms, would promote overall labor productivity growth by incentivizing less productive industries and firms to invest in new (labor-saving) technologies while

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¹² According to Thelen (2009: 306-307), public spending on education increased from 5.3% of GDP in 1990 to 7.4% in 2000, with spending on tertiary education accounting for nearly half of the increase (rising from 1% in 1990 to 2% in 2000). Thelen also documents sharp rises in the percentage of the population with tertiary education and the percentage of households with computers and internet access.

incentivizing more productive firms to expand employment.¹³ As noted above, the new system of coordinated wage bargaining that was institutionalized in the late 1990s aimed at adjusting nominal wage growth in the exposed sector to the pace of nominal wage growth in the Eurozone. At the same time, coordinated bargaining with strong public-sector unions served to ensure that wages in sheltered sectors (private as well as public) would keep up with wages in the exposed sector. Especially in view of the extensive room for firm-level bargaining with the framework established by the Industrial Agreement of 1998, central wage-bargaining arrangements to achieve wage moderation can hardly account for the fact that manufacturing productivity growth in Sweden outpaced that of other European countries in 1995-2007. A plausible case can be made that wage pressure from pattern bargaining contributed to the high rate of productivity in services (cf. Westermark 2019), but a plausible case can also be made that strong productivity growth enabled employers in sheltered sectors to cope with the wage pressure generated by exposed-sector-leadership in the wage-bargaining process. Our purpose here is not identify causality, but rather to emphasize that wage growth and productivity growth are mutually supportive.

The deceleration of Swedish productivity growth in 2010s runs counter to the argument about wage equalization as a source of transformative pressure, for equalization remained a prominent feature of wage bargaining in 2010s (see footnote 11). At the same, however, the crisis clearly dampened average wage growth and this, along with currency depreciations in the second half of the 2010s, may well have contributed to the deceleration of productivity growth, especially in the exposed sector. The main take-away of the preceding discussion is that none of the causal variables that we have identified provides a satisfactory stand-alone account of Swedish productivity growth over the last three or four decades. Temporal change as well as cross-national variation in productivity should be seen, we think, as the product of complex interactions between aggregate demand, technological opportunities and

¹³ See Erixon (2008 and 2015b) on the Rehn-Meidner model and its continued relevance.

institutional frameworks. Put differently, the productivity miracle of 1994-2007 rested on a fortuitous combination of factors that was unlikely to persist indefinitely.

A financialized growth model?

Let us now turn to the topic of financialization and, more specifically, to Belfrage and Kallifatides' (2018) contention that financial deregulation in the late 1980s and further neo-liberal reforms in the early 1990s ushered in a new, finance-dominated, Swedish growth model. As articulated by Belfrage and Kallifatides, the rise of finance to a dominant role involves three specific claims: (1) credit has become the primary source whereby households finance consumption; (2) the financial sector has become the leading sector of the Swedish economy; and (3) investment and other strategic decisions by non-financial corporations have increasingly been driven by financial considerations. Let us briefly consider each of these claims.

As shown in Figure 4, household indebtedness increased dramatically in Sweden in 1990s and 2000s, much like the UK and the US and in marked contrast to Germany. Still more strikingly, the financial crisis of 2007-08 did not reverse the growth of household indebtedness in Sweden, as it did in both the UK and the US. As noted by Andersson and Jonung (2015), among others, the rise in household indebtedness primarily involved mortgage lending by banks and closely tracked rising house prices through the early 2010s (see also Anderson and Kurzer 2020). Credit contributed to household consumption already in the period leading up to the Great Recession, but the role of credit as a source of domestic demand increased significantly as wage growth slowed in the 2010s.

[Figure 4]

Consistent with the financialization story, the total value of bank loans in Sweden tripled from 2001 to 2018, but bank loans were overwhelmingly offered to house buyers and financial corporations. Only 13% of new bank loans over this period went to non-financial Swedish corporations (Kazen Orrefur 2019: 22-23) despite the fact that their debt rose substantially in relation to both GDP and profits in the 2010s by international standard. By financing investment in financial assets as well as dwellings, private banks—essentially four banks (Nordea, SEB, Handelsbanken and Sweden)—created a huge amount of new money in the 2010s. It is important to keep in mind, however, that the creation of bank money was very much encouraged by the interest-rate policy of the *Riksbank*. Moreover, the financial sector's share of total business value-added has fluctuated between 4 percent and 5 percent since the mid-1990s. By this measure, the Swedish economy remains less financialized than many other OECD economies. Section 2011 is simportant to the sum of the Swedish economy remains less financialized than many other OECD economies.

Turning to the behavior of non-financial corporations, Figure 5 shows the evolution of their operating surplus (i.e., profits from the production of goods and services) and returns on financial assets (financial profits) from 1997 to 2019. Notwithstanding the steady rise of stock-market prices, industrial profits exceeded financial profits throughout this period. It is also noteworthy that the two types of profits have moved in tandem. In other words, aggregate financial profits do not seem to operate by a different logic from aggregate industrial profits. The gap between them appears to have diminished in the mid-2010s, but this partly reflects their divergence in the wake of the financial crisis. Comparing 2015-19 to 2003-07, it is not obviously the case that financial profits have become more important to non-financial corporations over time.

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¹⁴ See OECD Financial Indicators Database.

¹⁵ Note also that the debt-to-equity ratio of non-financial corporations did not increase Sweden in the 2010s (OECD Financial Indicators Database).

¹⁶ While recognizing this point, Belfrage and Kallifatides (2018: 884-886) claim that profits of financial corporations exceeded the profits non-financial corporations in 2005-14. If profits are measured as a percentage of value-added, as they ought to be, the differential between financial and non-financial profits would have to be huge in order for this claim to be true!

[Figure 5]

A crucial question in this context is whether or not investments in real estate and financial assets have crowded out productivity-enhancing investments in equipment, R&D and "intangibles" such as software. In a very preliminary way, Figure 6 addresses this question by comparing the evolution of gross fixed capital formation by business in "financialized Sweden" and "non-financialized Germany." For each country, we present a curve for the entire business sector and another curve for businesses other than finance and housing construction. As these figures concern fixed capital formation, the financial sector is of minor importance and the comparison here is really between investment in housing and investment in other business sectors. As expected, we find that real-estate investment has lagged behind other forms of real investment in Germany since the early 2000s while real-estate investment has increased faster than other forms of investment in Sweden over the same time period. However, the more striking cross-country contrast that emerges from Figure 6 is that gross capital formation increased at a much faster rate in Sweden than in Germany even if we exclude dwellings. In short, the comparison with Germany calls into question the proposition that the Swedish construction boom of the 2010s crowded out investment in other forms of fixed capital.¹⁷

[Figure 6]

In our view, the concept of "financialization" captures several long-term economic developments with important implications for macroeconomic dynamics, but it is misleading to speak of the emergence of a new Swedish growth model distinguished by the leading role of the financial sector or by the dominance of financial speculation over real economic activities. To posit the development of such a growth model in the 1990s calls into question the common—and, we think, reasonable—supposition that

¹⁷ Note also that R&D investment by Swedish business declined in the 2000s but recovered slightly in the 2010s (Statistics Sweden, *Fasta bruttoinvesteringar, ENS2010 efter näringsgren SNI 2007 och investeringstyp, 1980-2019*).

finance dominance is anathema to productivity growth. As for the consumption-led recovery of the 2010s, it is important to recognize that Swedish real wages did grow at a relatively healthy pace and that wages at the bottom of the earnings distribution kept pace with average wages. Developments in the last few years could plausibly be invoked in support of the idea that a finance-dominated growth model has finally emerged, but the durability of these developments remains an open question.

Business diversification and the politics of macroeconomic management

Following Thelen (2019), we want to highlight the diversification of Swedish business over the time period covered by the preceding analysis and to suggest that this diversification facilitated the pursuit of consumption-led growth in 2010s. Again, the comparison with Germany is instructive from this point of view. In Sweden, much like Germany, export-oriented manufacturing was the leading sector of the post-war era and remained dominant through the 1980s, but the two countries subsequently diverged. To use Thelen's felicitous characterization of this divergence, Germany "doubled down" on its reliance on traditional manufacturing exports while Sweden "branched out."

The key role of the ICT sector came to assume in the economic recovery of the 1990s represents the most obvious indicator of structural changes within the framework of (balanced) export-led growth (Erixon 2011: 308-312). A traditional telecom company that embraced the "ICT revolution" in the 1990s, Ericsson alone accounted for nearly one-fifth of Swedish exports in 1999-2000. The share of ICT products in total export diminished in Sweden in the early 2000s, but it still remains higher than in Germany and most other European countries (World Bank database, ICT goods exports 2000-2019). As we have stressed throughout this preceding discussion, the role that the ICT has assumed since the mid-1990s extends far beyond exports of "ICT products." Software services became an important source of export earnings in

the decade prior the crisis of 2008-09. Since 2015, Ericsson is actually classified by Statistics Sweden as a producer of services. Also, new products generated by the ICT sector contributed to rapid productivity growth across the Swedish economy and thus boosted the competitiveness of a wide range of exports.

Linked to the rise of the ICT sector, the steady growth in the importance of service exports constitutes another important dimension of the diversification of the Swedish growth model since the mid-1990s (cf. Baccaro and Pontusson 2016). While service exports accounted for 6 per cent of GDP and 18 percent of all exports in 1993-95, they accounted for 10 percent of GDP and 22 percent of all exports in 2006-07. The retreat from export-led growth that occurred in the wake of the global crisis of 2008-09 was all about raw materials and manufactured goods. From the mid-2000s to the mid-2010s, goods exports declined from 36 percent to 30 percent of GDP while services exports increased from 10 percent to 14 percent. By 2014-16, exports of services accounted for a whopping 47 percent of Swedish exports, as compared to 17.4 percent of German exports. ¹⁸ On the premise that competitiveness in world markets for services, at least the kinds of services that Sweden primarily exports, is less a function of labour costs than competitiveness in world markets for manufactured goods, the shift services exports might be invoked from to explain the combination of export-led and consumption-led growth that characterizes the Swedish case over the period 1994-2007 and, to a lesser extent, the 2010s as well (Baccaro and Pontusson 2016).

Initiated by the Center-Right government of 1991, tolerated by Social Democratic governments between 1994 and 2006 and further promoted by the Center-Right parties after 2006, the privatization of education and welfare services represents another important form of business diversification. The consumption of education, healthcare and elderly care remains almost entirely funded by government(s), but private for-profit providers have become increasingly prominent in this domain. From 2002 to 2014,

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¹⁸ Source: OECD Balance-of-Payments Database.

public disbursements to for-profit providers in education increased by 247 percent from 2003 to 2014 (Svallfors and Tyllström 2019: 748-749). Over the same time period, disbursements to for-profit providers in healthcare increased by 106 percent and disbursements to for-profit providers in elderly care increased by 130 percent. While overall employment in these three sectors increased by 20 percent from 2000 to 2015, employment by for-profit providers increased by 65 percent (accounting for roughly 20 percent of total employment in 2015). Importantly, large companies controlled by the Wallenbergs' investment company (Investor) and other financial groups have come to dominate this new sector of business activities, sometimes referred to as the "welfare-industrial complex" by Swedish commentators. As Svallfors and Tyllström (2019) emphasize, organized business has become less vocal in its opposition to the welfare state at the same time as corporate actors have become directly involved in reshaping the welfare state (see also Busemeyer and Thelen 2020).

As late as the 1980s, large export-oriented engineering firms constituted a cohesive group at the core of the coalition of organized interests that supported the Swedish growth model. Twenty or thirty years later, it is more difficult to identify Sweden's dominant "fraction of capital." The point here is not no so much that new actors have emerged, challenging the interests of export-oriented manufacturing, but rather that the manufacturing firms and their owners have diversified and that the interests of export-oriented manufacturing firms have become more ambiguous. As exports have shifted to more knowledge-intensive products and services, export-oriented firms have become less concerned with domestic labor costs. At the same time, the growing reliance on global supply chains in more traditional manufacturing has made devaluation less attractive as means to address labor costs. Arguably, this

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¹⁹ According to a report by Public Education Authority cited by Svallfors and Tyllström (2019: 749), the 10 largest forprofit providers account for one fifth of primary education and one-third of secondary education in 2014. See also Busemeyer and Thelen (2020).

diversification of businesses and their interests leaves more freedom for government officials and parliaments to determine macroeconomic policies.

The fact that Swedish governments pursued more expansionary fiscal and monetary policies than German governments in the 2010s can partly be explained by the fact that Swedish business did not rally behind domestic austerity, but party politics deserve to be taken into account as well. With the entry of the populist Sweden Democrats into parliament in 2010, neither of the two partisan coalitions that have competed for government power since the 1970s commanded a parliamentary majority in the 2010s. In this new situation, the Center-Right coalition government of 2010 and the Social Democratic-Green coalition government of 2014 both eschewed austerity measures that seemed likely to weaken their reelection prospects. Austerity would have required a German-style grand coalition government. It tempting to argue that the deep Left-Right divide in Swedish politics precluded such a coalition, but there is a further twist that deserves to be noted: in contrast to Germany, there has never been a truly dominant Center-Right party in Sweden (cf. Castles 1978). Competition among the bourgeois parties makes it difficult for anyone (or any two) of these parties to enter into a formal coalition with the Social Democrats. Since the transformation of the Agrarian Party into a centrist bourgeois party in the 1960s, fragmentation on the Right of the political spectrum has effectively reinforced the Left-Right divide. Against this background, the lack of clear parliamentary majorities helps explain the consensus on macroeconomic management being delegated to the *Riksbank* in the 1990s.

Summary

As we have seen, financialization and diversification of non-financial business activities constitute long-term developments that have changed—and continue to change—the structure of the Swedish

economy. These developments have important implications for macroeconomic dynamics, first and foremost through the implications for the politics of macroeconomic management. Yet neither development taken by itself nor the two taken together provides an adequate basis for identifying a new "growth model" in the sense that this term is used by Baccaro and Pontusson (2016) and other contributors to the emerging growth-models literature.

Sweden exhibited high GDP growth and especially high productivity growth from the mid-1990s until the Great Recession. We have established that Swedish economic recoveries in the late 1990s and early 2000s were primarily export-led and partially profit-led. These recoveries might have generated high consumption and productivity growth by the extensive diffusion of wages and technologies from export-oriented manufacturing firms into other sectors of the economy. It is likely that the export multiplier was reinforced by the wage bargaining system, generating wage-led growth in sheltered sectors. At the same time, the importance of the ICT sector for productivity, export (of both products and services) and investment across sectors added a technology-led (supply-side) component to the Swedish growth model anchored in the national innovation system. By comparison, exports and productivity played a much less important role in the recovery of the early 2010s. As in the pre-crisis period, relatively egalitarian wage growth stimulated consumption growth, but credit also appears to have emerged as an important support for sustained household consumption in this period. Crucially, the shift in macroeconomic dynamics triggered by the Great Recession cannot be labelled as "profit-led," for sectors characterized by lower profit shares than the manufacturing sector grew their shares of investment as well as value-added in the course of the 2010s (and the profit share in the business sector as a whole continued to decline).

The post-crisis shift can largely be explained by sluggish foreign demand for Swedish exports (especially manufacturing exports) and by expansionary macroeconomic policies—most importantly, over

the long haul, monetary policy—pursued by the government and the *Riksbank*, boosting housing construction and household consumption. This shift was arguably facilitated by institutional reforms that were made in the 1990s, including the new bargaining system and monetary policy as well as financial deregulation and tax treatment of mortgages. Importantly, we think, the shift itself did not involve much political contestation or any noteworthy new institutional reforms. The ease with which Sweden moved from export-led to consumption-led balanced growth may be reason enough to characterize this shift as an adjustment of the (balanced) growth model rather than a transition from one growth model to another, but we leave this as an open conceptual question for the time being.

Contrary to proponents of the idea that a finance-dominated growth model has emerged, we do not see any structural obstacles that would prevent the Swedish economy from becoming export-led again if foreign demand for Swedish exports were to pick up in the 2020s. That said, we hasten to reiterate that high productivity growth provided a crucial underpinning of the fortuitous combination of growth through exports and domestic consumption that Sweden achieved in 1994-2007. In the absence of a new spurt of productivity growth, the restoration of export-led growth would require policies to suppress domestic consumption along the lines of the export-led strategy pursued by German governments and, as suggested above, this would in turn require a rather major reconfiguration of party politics.

REFERENCES

Alexius, Annika and Erik Post. 2008. "Exchange Rates and Asymmetric Shocks in Small Open Economies." *Empirical Economics* 35(3): 527-541.

Anderson, Karen and Paulette Kurzer. 2020. "The Politics of Mortgage Credit Expansion in Small Coordinated Market Economies." West European Politics 43(2): 366-389.

Andersson, Fredrik and Lars Jonung. 2015. "Krasch, boom, krasch? Den svenska kreditcykeln." (Crash, Bom, Crash). *Ekonomisk Debatt* 43(8): 17-31.

Assous, Michael and Krishna Dutt. 2013. "Growth and Income Distribution with the Dynamica of Power in Labour and Goods Markets." *Cambridge Journal of Economics* 37(6): 140-1430.

Baccaro, Lucio and Chris Howell. 2017. *Trajectories of Neoliberal Transformation: European Industrial Relations Since the 1970s.* Cambridge: Cambridge University Press.

Baccaro, Lucio and Jonas Pontusson. 2016. "Rethinking Comparative Political Economy: The Growth Model Perspective." *Politics and Society* 44(2): 175-207.

Baccaro, Lucio and Jonas Pontusson. 2021. "European Growth Models Before and After the Great Recession. In Anke Hassel and Bruno Palier, eds., *Growth and Welfare in Advanced Capitalist Economies* (Oxford: Oxford University Press), 98-134.

Belfrage, Claes and Markus Kallifatides. 2018. "Financialization and the New Swedish Model." *Cambridge Journal of Economics* 42: 875-899.

Bengtsson, Erik. 2014. "Labour's Share in Twentieth-Century Sweden: A Reinterpretation." *Scandinavian Economic History Review* 6(3): 90-314.

Bergh, Anders and Gissur Erlingsson. 2009. "Liberalisation without Retrenchment." *Scandinavian Political Studies* 32(1): 71-93.

Bitard, Pierre; Charles Edquist, Leif Hommen and Annika Rickne. 2008. "Reconsidering the Paradox of High R&D Input and Low Innovation: Sweden." In Edquist and Hommen, eds., *Small Couuntry Innovation Systems* (Cheltenham: Edward Elgar), 237-280.

Blyth, Mark. 2002. *Great Transformations: Economic Ideas and Institutional Change in the Twentieth Century*. Cambridge: Cambridge University Press.

Boyer, Robert and Yves Saillard, eds. 2005. Regulation Theory: The State of the Art. London: Routledge.

Buendia, Luis and Pedro Rey-Araújo. 2021. "This Time Was Different: The Crisis that Went Past Sweden." In Luis Cárdenas and Javier Arribas, eds., *Institutional Change After the Great Recession: European Growth Models at the Crossroads* (London: Routledge).

Busemeyer, Marius and Kathleen Thelen. 2020. "Institutional Sources of Business Power." World Politics 72(3): 448-480.

Castles, Francis. 1978. The Social Democratic Imagine of Society. Boston: Routledge & Kegan Paul.

Edquist, Charles and Bengt-Åke Lundvall. 1993. "Comparing the Danish and Swedish National Systems of Innovation." In Richard Nelson, ed., *National Systems of Innovation* (Oxford: Oxford University Press), 265–98.

Edquist, Harald. 2009. "Hur länge förblir IKT avgörande för svensk produktitivitetsutveckling?" *Ekonomisk Debatt* 37(1): 31-40.

Edvinsson, Rodney. 2005. *Growth, Accumulation, Crisis: With New Macroeconomic Data for Sweden,* 1800-2000. PhD Thesis, Stockholm Studies in Economic History 41 (Stockholm University).

Eliasson, Kent and Pär Hansson. 2016. "Are Workers More Vulnerable in Tradeable Industries?" *Review of World Economics* 152(2): 283-320.

Erixon, Lennart. 1984. "Den svenska modellen i motgång. En analys av dess effekter och förändrade förutsättningar under perioden 1974-1984." (The Swedish Model in Adversity), *Nordisk Tidskrift för Politisk Ekonomi*, no. 15/16: 109-158.

Erixon, Lennart. 1987. *Profitability in Swedish Manufacturing: Trends and Explanations*. Stockholm: Almvist & Wiksell International.

Erixon, Lennart. 1989. "Den tredje vägen: Inlåsning eller förnyelse?" Ekonomisk Debatt 17(3): 181-195.

Erixon, Lennart. 1997. The Golden Age of the Swedish Model. The Coherence Between Capital Accumulation and Economic Policy in Sweden in the Earl Postwar Period." *Report 97:9*, Institutt for Samfunnsforskning (Institute for Social Research): Oslo.

Erixon, Lennart. 2008. "The Swedish Third Way: An Assessment of the Performance and Validity of the Rehn-Meidner Model." *Cambridge Journal of Economics* 32(3): 367-393.

Erixon, Lennart. 2011. "Under the Influence of Traumatic Events, New Ideas, Economic Experts and the ICT Revolution: The Economic Policy and Macroeconomic Performance of Sweden in the 1990s and 2000s." In *Comparative Social Research*, v. 28, "The Nordic Varieties of Capitalism" (Oslo: Emerald Group), 265-330.

Erixon, Lennart. 2015a. "Can Fiscal Austerity be Expansionary in Present-Day Europe? The Lessons from Sweden." *Review of Keynesian Economics* 3(4): 567-601.

Erixon, Lennart. 2015b. "Den solidariska lönepolitikens betydelse för strukturomvandlingen och tillväxten I dagens Sverige – teorier och belysningar." In Tony Johansson, ed., *Lönebildning bortom NAIRU* (Stockholm: Landsorganisationen i Sverige), 26-85.

Erixon, Lennart. 2021. "Industriavtalet: Luftslott eller riksintresse?" (An Illusion or a National Interest?). Department of Economics, Stockholm University (mimeo).

Gordon, Robert J. 2014. "The Demise of US Economic Growth: Restatement, Rebuttal, and Reflections." *NBER Working Paper no. 19895.* New York: The National Bureau of Economic Research.

Gourevitch, Peter. 1986. Politics in Hard Times. Ithaca: Cornell University Press.

Kazen Orrefur, Samuel. 2019. "Förstatliga pengarna – så stoppar vi bankerna från att skapa finanskriser." (Nationalize Money – How to Stop Banks from Causing Financial Crises). Katalys report no. 68 (Stockholm: Katalys).

Lavoie, Marc. 2017. "The Origins and Evolution of the Debate on Wage-Led and Profit-Led Regimes." *European Journal of Economics and Economic Policies* 14(2): 200-221.

Leeper, Eric M. 2018. "Sweden's Fiscal Framework and Monetary Policy." Report to the Swedish Fiscal Policy Council 2018/3.

Messina, Julian, Chiara Strozzi and Jarkko Turunen. 2009. "Real Wages over the Business Cycle." Working Paper Series No. 1003. Frankfurt am Main: European Central Bank.

Ornston, Darius. 2013. "Creative Corporatism: The Politics of High-Technology Competition in Nordic Europe." *Comparative Political Studies* 46(6): 702-729.

Palley, Tomas. 2017. "Wage- vs. Profit-Led Growth: The Role of the Distribution of Wages in Determining Regime Character." *Cambridge Journal of Economics* 41(1): 49-61.

Pontusson, Jonas. 1992a. *The Limits of Social Democracy: Investment Politics in Sweden.* Ithaca: Cornell University Press.

Pontusson, Jonas. 1992b. "At the End of the Third Road: Swedish Social Democracy in Crisis." *Politics and Society* 20(3): 305-332.

Pontusson, Jonas. 2011. "Once Again A Model: Nordic Social Democracy in a Globalized Age." In James Cronin, George Ross and James Shoch, eds., *Futures of the Left* (Durham: Duke University Press), 89-115.

Pontusson, Jonas and Peter Swenson. 1996. "Labor Markets, Production Strategies, and Wagebargaining Institutions: The Swedish Employers' Offensive in Comparative Perspective." *Comparative Political Studies* 29(2): 223-250.

Skott, Peter. 2015. "Growth Cycles with or without Price Flexibility." *Review of Keynesian Economics* 3(3): 374-386.

Svallfors, Stefan and Anna Tyllström. 2019. "Resilient Privatization: The Puzzling Case of For-Profit Welfare Providers in Sweden." *Socio-Economic Review* 17(3): 745-765.

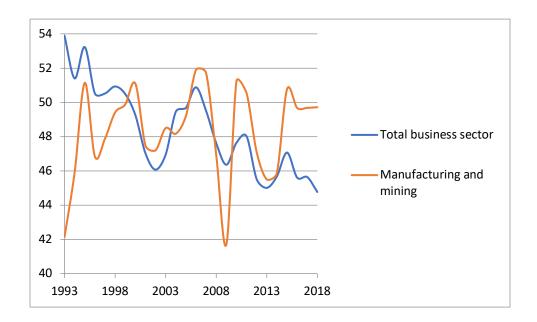
Swenson, Peter. 2002. Capitalists Against Markets: The Making of Labor Markets and Welfare States in the United States and Sweden. New York: Oxford University Press.

Thelen, Kathleen. 2019. "Transitions to the Knowledge Economy in Germany, Sweden and the Netherlands." *Comparative Politics* 51(2): 295-315.

Visser, Jelle. 2019. ICTWSS Database, version 6.1, University of Amsterdam. https://www.oecd.org/employment/ictwss-database.htm

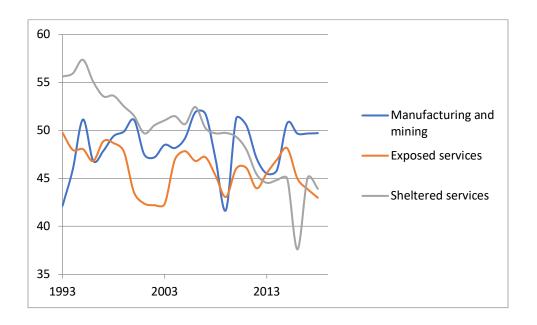
Westermark, Andreas. 2019. "Lönebildningen i Sverige: med Tyskland som kompass?" *Penning- och Valutapolitik* 2019(2): 90-113.

Figure 1: Gross profit share in percent of gross value-added, total business sector (less agriculture, forestry and fishing) and manufacturing and mining, 1993-2018.



Source: Own estimates based on the National Accounts Database of Statistics Sweden (Statistikdatabasen), Table Förädlingsvärdets delkomponenter (ENS 2010) mnkr efter näringsgren SNI 2007 (Swedish industry classification based on NACE, rev. 2). Note that our calculations for the total business sector exclude agriculture, forestry and fishing.

Figure 2: Gross profit share in percent of gross value-added, manufacturing and mining, exposed services and sheltered services, 1993-2018.



Source: Owned calculations based on National Accounts (see Figure 1). See also footnote 5.

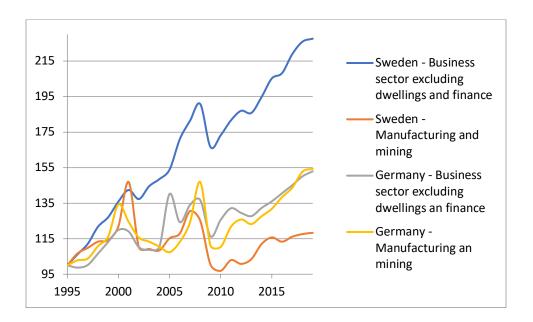
Table 1: The sectoral distribution of total value-added by business (excluding agriculture, forestry and fishing), 1995-2018.

	1995	2005	2010	2018
Manufacturing and mining	29.8 %	25.9 %	22.5 %	20.3 %
Exposed services	23.1	28.5	27.3	29.0
Sheltered services	46.5	44.9	46.6	49.5

Source: See

Figure 1 and also footnote 5.

Figure 3: Gross fixed capital formation (at constant prices) in the total business sector (excluding dwellings, finance and insurance) and in manufacturing and mining, Sweden and Germany 1995-2019 (1995=100).



Source: OECD database, 8A Capital Formation by Activity, ISIC rev 4.

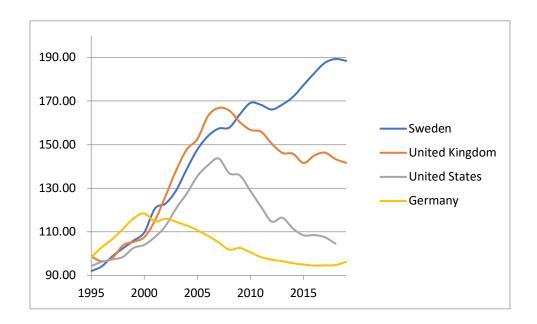
Note: The business sector has been derived here by subtracting Public administration and defence, compulsory social security (VO), Education (VP) and Human health and social work activities (VQ) from the economy (see the ISIC rev 4 classification). The exclusion of services provided by private companies in these sectors has only a marginal impact on total investments in the business sector in the two countries.

Table 2: Average annual percentage changes in labour productivity (value added per hour worked) in the non-agriculture business sector (excluding real estate), manufacturing and the private service sector (excluding real estate). Sweden, Germany, United Kingdom and the United States, 1995-2007 and 2008-2019.

		1995-2007	2008-19			
Total business						
	Sweden	3.9	1.2			
	Germany	1.9	0.8			
	UK	2.7	0.4			
	USA	2.5	1.4			
Manufacturing						
	Sweden	6.1	1.5			
	Germany	3.2	0.9			
	UK	2.5	0.5			
	USA	4.4	0.2			
Private services						
	Sweden	3.4	1.7			
	Germany	1.4	0.8			
	UK	3.3	0.6			
	USA	2.7	n.a.			

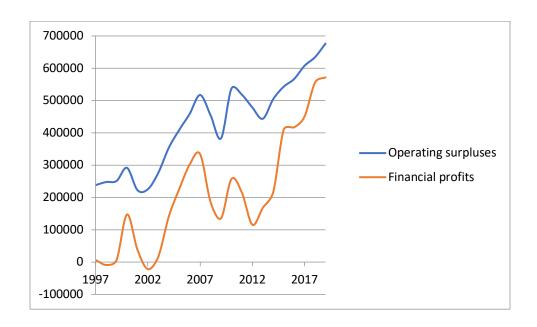
Source: OECD database, National Accounts, Productivity and labour costs, ISIC rev. 4 . Data on productivity growth in the private-service sector for the United States 1995-2007 are imported from a discontinued time series not fully comparable with data for the other countries (OECD database, National Accounts, Productivity by Industry, ISIC rev. 3). Data for the United States on labor productivity in manufacturing and in the total business sector (less agriculture) are imported from the U.S. Bureau of Labor Statistics.

Figure 4: Debt of households and non-profit institutions serving households (NPISHs) as a percent of net disposable income (NDI) in Sweden, Germany, United Kingdom and the United States, 1995-2019.



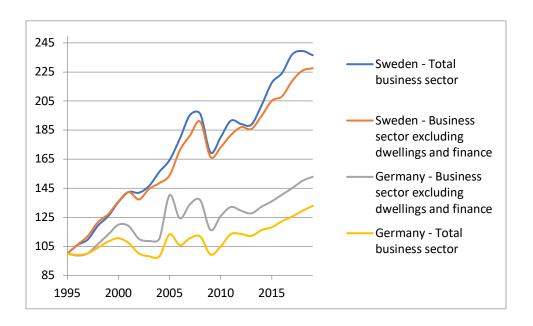
Source: OECD database, Financial Indicators.

Figure 5: Annual operating surpluses and profits on financial assets in Swedish non-financial companies in 1997-2019 (million SEK)



Source: Company data from Statistics Sweden (Företagsräkningsposter enligt Företagens ekonomi).

Figure 6: Gross fixed capital formation (constant prices) in the total business sector and the business sector excluding real estate and finance (including insurance). Sweden and Germany, 1995-2019 (1995=100).



Source: See Figure 3.