



Fads and Trends in OECD Economic Thinking on Denmark: A Word-Frequency Approach

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[LINK TO ABSTRACT](#)

Economics is the most politically influential social science (Hirschman and Berman 2014). But such influence has limits. The history of European monetary integration and attempts by U.S. presidents to influence the Federal Reserve show how political considerations can trump economic reasoning. Still, economists affect policy directly when they occupy positions of power; the decision of a central bank governor to implement quantitative easing is a case in point. A different and perhaps more important type of influence is indirect. Economics is a way of reasoning about public policy that circulates well beyond the economics profession (Sandel 2012; Fourcade et al. 2015). Undergraduate students in political science, law, and public policy all receive basic training in economics. At the same time international organizations such as the OECD supply decisionmakers with economic analyses galore, which spreads economic ideas to many areas of public policy.

Yet economics is not a cumulative science that moves ever closer to truth (Rodrik 2015). The key ideas that shape economic arguments are prone to sporadic fads and more persistent trends (White 2012). For example, the idea that market discipline leads financial institutions to self-regulate—a derivative of the efficient market hypothesis—was fashionable in the decade leading up to the 2008 financial crisis.² So was the idea that scientific improvements in monetary policy had caused

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2. An anti-regulatory philosophy was advanced within the international banking system by the Basel

a great moderation.³ Both ideas have few adherents today (Bayoumi 2017). It is therefore worthwhile to gain perspective on how economic ideas change over time (White 2012).

The perspective I offer in this paper relies on the frequencies of certain key words in OECD reports. The OECD is an important propagator of policy-relevant economic ideas. Up to 40,000 bureaucrats and experts from member countries go to Paris each year to participate in OECD activities (Ougaard 2010). When the same individuals from economic ministries, central banks, international organizations, and the OECD Secretariat meet regularly, it promotes a common understanding of how the economy works. According to a Canadian official “the most important thing that changes because of the OECD might be the thinking of the people involved” (Woodward 2010, 58). It is not just bureaucrats and experts that are influenced by the OECD. Legislators are also influenced by OECD analyses and generally hold them in high regard (Marcussen 2002).

The most important window into OECD economic thinking is its periodic *Economic Surveys* of individual countries. These publications assess countries’ performance against the OECD’s conceptions of best practice, identify deficiencies, and advise reforms (Woodward 2010). In this study I calculate word frequencies in the *OECD Economic Surveys* of Denmark—published regularly since 1962—mostly because I am familiar with Danish postwar economic history but also because Denmark is a small country that is unable to leverage excessive influence on the OECD. Conceivably the *Economic Surveys* of Denmark ([link](#)) provide a useful perspective on OECD economic thinking.

Word frequencies offer a useful quantitative perspective on how economic ideas change over time. Graphs of word frequencies show us when ideas waxed and waned. They show, for example, that in the 1960s and 1970s “demand management” and “incomes policy” enjoyed high frequency in the *Surveys*, but they had all but vanished by 1990. In the 1990s the natural rate hypothesis had replaced the Keynesian framework, and it has remained the macroeconomic workhorse in the *Surveys* ever since. Prior to 1990 “incentives” was little used in the *Surveys*, but its usage rose greatly thereafter and remains high. Special focus has been placed on the incentive effects on labor supply of generous unemployment benefits and high marginal income taxes. In the late 1990s education also came under scrutiny, and “structural reform” became very fashionable. Among other things, advice has aimed at increasing the effective labor supply by inducing students to complete

Committee on Banking Supervision, which allowed large banks to use their own internal value-at-risk models to calculate capital buffers for investment banking operations (Bayoumi 2017).

3. The idea of a great moderation led policymakers to overestimate the ability of monetary policy to stabilize the economy in face of shocks. That is, there was no need to act preemptively to prevent potential bubbles (Bayoumi 2017).

their studies faster. After the 2008 financial crisis the *Surveys* talked of “macroprudential” policies. Macroprudential policy and incomes policy are kindred spirits. Both are premised on the belief that policymakers should be ready to intervene to curb what is perceived as unsustainable price developments. In this respect the *Surveys* have come full circle.

Text preparation

I use so-called dictionary text mining, which starts with a predefined list of keywords and counts the number of occurrences of keywords in the corpus of text. The analytical quantity of interest is word frequency, which is the number of times a keyword is mentioned divided by total word count. The advantage of this approach is simplicity; the weakness is that it focuses only on words pre-judged by the researcher to be of interest (Bholat et al. 2015). In the present case, I have simply chosen the keywords that I think are the most interesting; there is no clever method to my choices.

I rely on text mining packages designed for use with the open-source software R to compute word frequencies. In terms of text preparation, I first read all *OECD Economic Surveys* of Denmark into R using the *pdftools* package. I then used the *tm* package to create a corpus, converted all text to lowercase, and then removed punctuation, numbers, and stop-words. The final step was to use the *tidytext* package to ‘tidy’ (equivalently, create a bag-of-words representation of) the text to be able to create the figures in the paper. Julia Silge and David Robinson (2017) provide a good discussion of the steps involved.

OECD economic thinking

Demand management and incomes policy

The early *Surveys* argued for active use of demand management.⁴ Danish policymakers in the 1960s sought to achieve full employment (internal balance)

4. The *Surveys* also propose reforms that may sharpen the effectiveness of demand management: “Since income taxes are paid with a considerable time lag, they may sometimes exert a destabilizing influence on demand. A change to a system whereby taxes are paid on a pay-as-you-earn basis would strengthen the built-in stabilizers of the government budget. A similar effect could be obtained by the introduction of a general value-added tax or a general sales tax at the retail level” (OECD 1966, 19).

and a balanced current account (external balance) in a small open economy with a fixed but adjustable exchange rate. As explained in the 1964 *Survey*, combining full employment and external balance calls for skillful demand management.⁵ Demand management is an *expenditure-changing* policy; i.e., it changes aggregate demand and thus indirectly net exports. In Denmark in the 1960s and 1970s both direct and indirect taxes were excluded from the so-called wage-regulating price index.⁶ Demand management could therefore offset demand effects of higher wages; it could not, however, offset the effect on costs. Consequently, the OECD also argued for more systematic use of incomes policy.

Incomes policy is an *expenditure-switching* policy; i.e., it changes the relative price of imports in terms of exports. Incomes policy represents such controls as quantitative restrictions on building permits, subsidy schemes to compensate employers for indexed increases in wages, temporary freezes on prices, ceilings on profit margins, and generally giving authorities wide scope for intervening in price formation. Rising prices necessitate “policies exerting a more direct impact on the movement of incomes than the traditional monetary and fiscal measures” (OECD 1964, 17). Incomes policy is ultimately aimed at keeping the real exchange rate from appreciating, which will safeguard export competitiveness.

The 1966 *Survey* was not impressed with the dexterity of Danish policymakers: “Had the timing of policy interventions been better, more stable conditions would probably have been obtained” (OECD 1966, 18). The *Survey* concluded that a “continued active demand-management policy is desirable, particularly with a more flexible use of fiscal policy” (*ibid.*).

Consider the competitive devaluation of the Danish krone in November 1967. The 1968 *Survey* noted that it was likely to have a positive effect on exports. But to take full advantage of the devaluation, demand management must ensure that imports are kept in check (*expenditure-changing* policy), and incomes policy must ensure that the competitive devaluation is not eroded by inflation (*expenditure-switching* policy). This epitomizes OECD macroeconomic thinking at the time.⁷

Figure 1 shows the frequency of mentions of “demand management” and “incomes policy” in the *Surveys*. During the 1960s and early 1970s both policy instruments were mentioned frequently. However, as of the first oil crisis in 1973

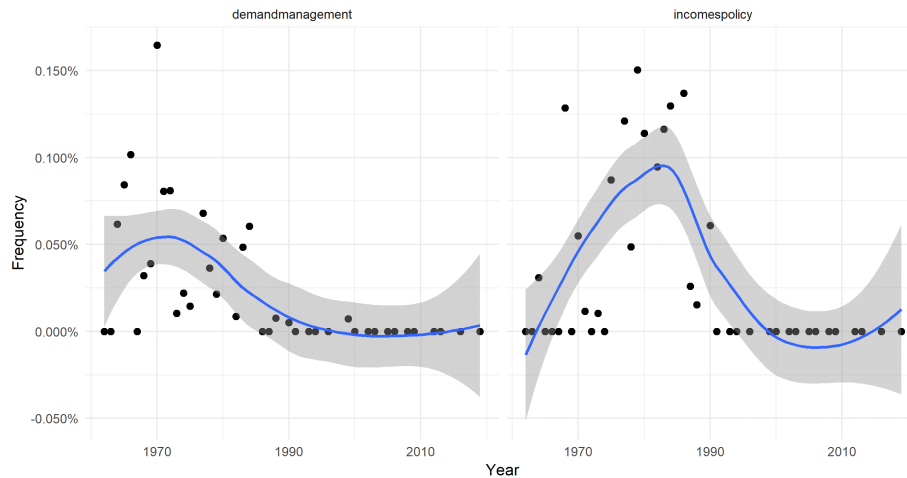
5. Fiscal policy targeted imports, while monetary policy targeted business investment. The direction of investment was important in the 1960s and early 1970s, as Denmark was undertaking a process of structural transformation from a primarily agricultural-based economy to an industrial economy.

6. Wages were automatically adjusted to changes in the wage-regulating price index. Every 3-point increase (about 2.5 percent) in the price index would release a wage increase of about 2 percent. Such adjustments could occur every six months.

7. Mathematically, this thinking is best captured by the famous Swan Diagram (Swan 1963).

mentions of demand management started to taper off.⁸ As of the mid-1980s mentions had all but vanished. Traditional Keynesian demand management ideas had definitively been laid to rest in the *Surveys*.⁹ Incomes policy, on the other hand, proved somewhat more tenacious.

Figure 1. Mentions of “demand management” and “incomes policy”



Notes: The figure shows the frequency of mentions of “demand management” and “incomes policy” \in {incomes policy, incomes policies} in the corpus of *Surveys*. As with all similar figures to follow in this paper, the source is: *OECD Economic Surveys of Denmark, 1962–2019*, and the shaded area represents a 95-percent confidence interval. The non-parametric smoother is loess (local regression) from the *ggplot2* package in *R*. Confidence intervals are calculated as the loess prediction ± 1.96 times the standard error of the loess prediction.

In the 1970s inflation and the balance of payments became increasing problems in Denmark. The OECD encouraged policymakers to address the inflation problem via incomes policy. The 1968 *Survey*, for example, noted that several other countries had been active in the field of incomes policy, and though

8. The reason why there is a spike in 1970 is that the 1970 *Survey* includes a lengthy appendix on how to improve demand management policy. Recommendations include better national accounts statistics, formal quantitative analysis of the budget’s effect on demand and production, economic forecasting integrated into the budget process, and taxes on corporations based on pay-as-you-earn as opposed to income earned on average 18 months earlier.

9. The political implications of Keynesian demand management policies were always controversial. The ideal Keynesian system requires a large state budget since the larger the budget, the larger the impact on economic activity. Moreover, the Keynesian system presupposes that there is no natural tendency to full employment, which goes against what James Tobin calls the central paradigm of the economics profession (Skidelsky 2018).

no country could point to any spectacular success, there were indications “that incomes policy in some countries is beginning to play a useful role.” Consequently, incomes policy is “a useful supplement to other policy instruments” (OECD 1968, 28–29). The 1970 *Survey* noted that Denmark was in a good position to deal with two main problems: domestic inflation and a large external deficit. The 1975 *Survey* was optimistic that incomes policy would halt inflation: “a wide range of incomes policy measures—implemented in the spring—should produce a significant deceleration in the rates of price and wage increases in the course of the year” (OECD 1975, 5). The 1977 *Survey* applauded several incomes policy measures that the Danish government implemented, as these had “enabled the authorities to support total demand while curbing the rate of inflation at the same time” (OECD 1977, 39).¹⁰

The 1979 *Survey* adopted a more pessimistic tone with respect to the possibility of successfully conducting stabilization policy using a combination of demand management and incomes policy. “Failure to improve the competitive position by incomes policy arrangements has implied that the fiscal policy adjustments required were more restrictive than would have been the case if wage increases had moderated” (OECD 1979, 40). Moreover, it noted that “Denmark’s relative cost and price position vis-à-vis its main competitors is unlikely to improve and may even worsen” (*ibid.*, 47). The 1980 *Survey* noted that “incomes policy has not led to any improvement in relative price performance” (OECD 1980, 47).

As of the mid-1980s incomes policy was mentioned with decreasing frequency (see Figure 1). This development largely coincided with the adoption of a fixed exchange rate regime in 1982, which led to a fundamental reorientation of macroeconomic policy and a resulting taming of inflation.

OECD economic thinking on demand management as manifested in the *Surveys* was largely in line with academic economics prior to the stagflation experience.¹¹ The stagflation of the 1970s shattered the belief in the existence of a stable Phillips curve offering a menu of combinations of unemployment and

10. Incomes policy measures included a subsidy scheme to compensate employers for half of the indexed increase in wages, a temporary freeze on prices, and attempts at convincing labor market partners to contain wage increase over and above that resulting from indexation.

11. Demand management came into widespread use after World War II. To a significant degree, it had its roots in Keynes (1936). He argued that capitalist economies could get stuck with high and persistent unemployment. According to orthodox theory, unemployment would lead wages to fall, which would eliminate any involuntary unemployment. At the same time interest rates would fall, leading to a recovery in investment (Worswick 1989). Keynes argued instead that money wages might be sticky; and, to the extent they were flexible, falling prices could in any case prevent real wages from falling. As for monetary policy there was no guarantee that a lower interest rate would be sufficient to bring about full economic recovery. This analysis pointed clearly to the idea that demand management through fiscal policy could prove to be a more powerful tool to return the economy to full employment (Skidelsky 2018).

inflation that policymakers could choose from. Stagflation arguably thus destroyed the premise of the Keynesian theory of economic policy: “The Keynesian promise had been to minimize unemployment without igniting inflation or resorting to oppressive controls. When it failed to deliver both it became politically useless” (Skidelsky 2018, 162).¹² The OECD’s tenacious faith in the ability of incomes policy measures to contain inflation appears strange to the modern reader.

The natural rate hypothesis

In his 1968 presidential address to the American Economic Association, Milton Friedman famously introduced the natural rate hypothesis. According to Friedman (1968) there is a natural rate of unemployment that is consistent with real forces and accurate perceptions, and unemployment can only be kept below the natural rate by accelerating inflation.¹³ Put differently, in the long run there is an unemployment rate determined by real factors that cannot be affected by demand management policies. Therefore, in the long run there is no stable trade-off between inflation and unemployment.

About a decade after Friedman’s 1968 presidential address, which has been said to mark a turning point in macroeconomics (Mankiw and Reis 2018), an inkling of it is first found in the *Surveys*. The 1977 *Survey* noted that “[c]ompared with the 1960s and early 1970s, a given rate of unemployment now seems to be associated with higher inflation” (OECD 1977, 9). It further noted that given “the customary non-linear relationship between the rate of wage increases and the rate of unemployment, the acceleration in inflation occurring in years of below-average unemployment was only partly offset by the deceleration registered during periods of relatively weak labour market conditions, i.e. years of excess demand pressure exerted a disproportionately large impact on the average rate of inflation” (ibid., 16). That is, the OECD hinted for the first time that the Phillips curve appeared to have broken down. Moreover, the *Survey* talked of a “full employment rate of unemployment” (ibid.).

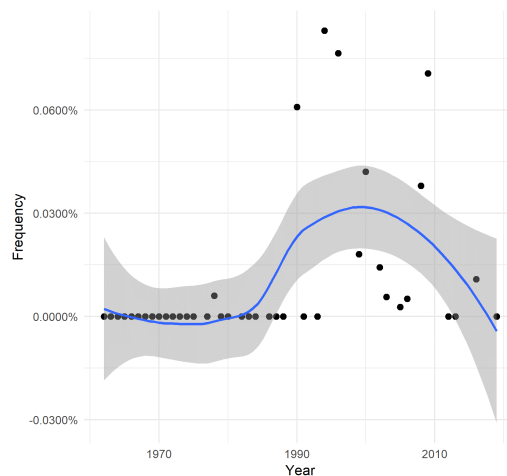
In OECD lingo the natural rate idea was expressed as “structural unemployment.” The 1978 *Survey* drew some specific consequences of this new thinking

12. Some take issue with this explanation. Stagflation was more a symptom than the disease itself. The underlying problem was a decline in corporate profitability, which started in the mid-1960s, and which caused high unemployment, low investment, and sluggish economic growth (Chernomas and Hudson 2017).

13. The natural rate hypothesis is really a joint hypothesis, composed of two sub-hypotheses. The first is that there is a natural rate of unemployment, independent of monetary policy. The second is that monetary policy cannot sustain unemployment below the natural rate without causing accelerating inflation (Blanchard 2018).

for the labor market. First, it explained that unemployment can be divided into a “cyclical” and a “non-cyclical” component, where the latter can be further subdivided into a “frictional” and a “structural” component (OECD 1978, 25). Frictional unemployment “is usually assumed to be that level of unemployment which exists even at ‘full employment’ and reflects the normal degree of turnover,” whereas structural unemployment “is largely independent of the actual demand situation and is related to more basic mismatches in the labour market as well as between capital and labour” (ibid.). Second, it applied this thinking to (partly) reconcile the simultaneous occurrence of high unemployment and high inflation with reference to factors “mainly on the labour supply side” (ibid., 26).¹⁴ The *Survey* inferred that “unemployment figures may tend to overstate the degree of slack in the economy” (ibid.). However, it was not until the 1990s that the term “structural unemployment” would be mentioned frequently in the *Surveys* (see Figure 2).

Figure 2. Mentions of “structural unemployment”

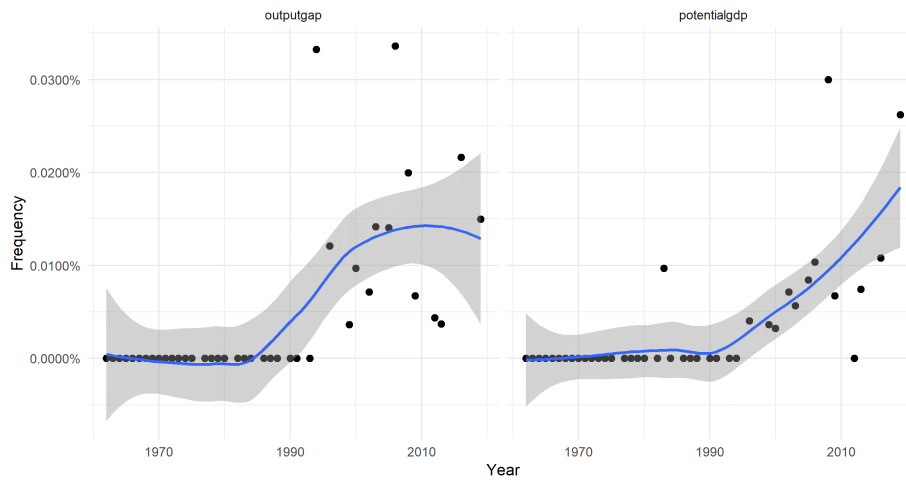


While the absence of a long-run trade-off between inflation and unemployment is now widely accepted, the possibility of a short-run trade-off implies that the natural rate of unemployment still occupies the center stage of policymaking (Blanchard 2018). The Taylor rule, for example, maintains that central banks can stabilize the inflation rate by assessing the position of the economy relative to benchmarks such as the natural rate of unemployment or potential GDP (i.e., GDP when unemployment is equal to the natural rate of unemployment). Figures 2 and 3 show that by the early 1990s the OECD had

14. Moreover, for the first time in the *Surveys*, the 1978 *Survey* suggested a potential link between unemployment and “the high and rising level of unemployment benefits” (OECD 1978, 26).

adopted these ideas derived from the natural rate hypothesis.¹⁵ The fact that mentions of “structural unemployment,” “potential GDP,” and the “output gap” (i.e., the difference between actual and potential GDP) sharply increased in the mid-1990s is almost certainly the result of the OECD Jobs Study (see OECD 1994a; b).

Figure 3. Mentions of “output gap” and “potential GDP”



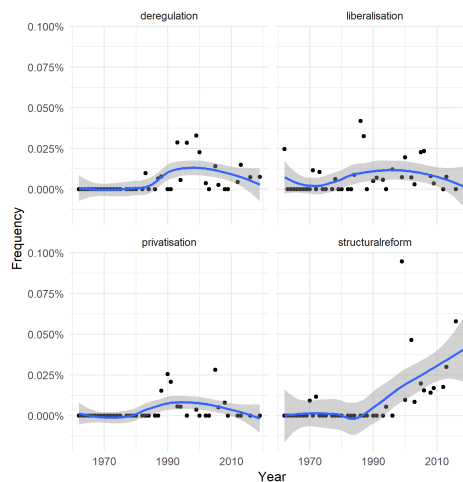
Note: Mentions of “output gap” and “potential GDP” \in {potential GDP, potential output}.

In the *Evidence and Explanations* report of the OECD Jobs Study the natural rate of unemployment (or, equivalently, structural unemployment) is understood as “an equilibrium concept” (OECD 1994b, 66). It is a function of “the underlying factors determining the supply of and demand for labor. These factors include the demographic composition of the labour force and the various regulations and institutions that influence the operation of the labour market, including employment protection and the unemployment compensation system.” The report also stated that structural reforms such as “increasing the incentives of unemployment compensation recipients to seek work” will likely have the effect of “lowering the equilibrium rate of unemployment as well as making for more rapid adjustment to it” (ibid., 67).

15. While the notion that there is a natural rate of unemployment that is determined by real factors is relatively uncontroversial, some authors have questioned the policy usefulness of the natural rate. It is an unobserved quantity, and it is not clear whether an understanding of the factors that influence the natural rate can be translated into an estimate that is accurate enough to be useful for policy. Moreover, even at business cycle frequency, fluctuations in the unemployment rate could represent fluctuations in the natural rate (Pries 2008). For a recent overview of the issues involved see Blanchard (2018).

The Jobs Study report argued that macroeconomic policies are not an effective way to reduce unemployment. Fiscal expansions are costly due to rising debt levels; long-term interest rates are likely to be affected adversely, which leads to crowding out of the private sector. At the same time reduced confidence will lead to a further reduction in private-sector expenditure. Monetary policy should only be concerned with the credibility of inflation expectations and long-term interest rates. Overall, the report disavowed discretionary macroeconomic policies and instead proposed structural policies to make the economy more flexible, which would be conducive to adjustment. The report noted that if “an economy is sufficiently flexible, then it will be easier to keep on a steady equilibrium path, since self-correcting forces will operate more effectively in returning the economy to equilibrium” (OECD 1994b, 73).

Figure 4. Mentions of “deregulation,” “liberalization,” “privatization,” and “structural reform”



Note: Mentions of “deregulation” \in {deregulate, deregulation}, “liberalisation” \in {liberalise, liberalisation}, “privatisation” \in {privatise, privatisation}, and “structural reform” \in {structural reform, structural reforms}.

The idea that structural reforms that increase microeconomic flexibility will reduce the natural rate of unemployment is part and parcel of post-1994 *Surveys*. The 2000 *Survey* puts it succinctly: “Sound structural policies play an important role in underpinning long-term economic performance by encouraging flexibility and responsiveness to market signals. ... Looking at Denmark’s performance over recent years, it has clearly been reaping the rewards of sounder structural policies. Economic outcomes have improved significantly in the 1990s. ... Labour-market reforms have resulted in lower structural unemployment in recent years and have

underpinned significant growth in private-sector employment” (OECD 2000, 69). Figure 4 confirms that mentions of structural reforms in the *Surveys* saw a significant increase after publication of the OECD Jobs Study results in 1994. The figure also suggests to me that “structural reform” came to encompass other words commonly associated with reforms.

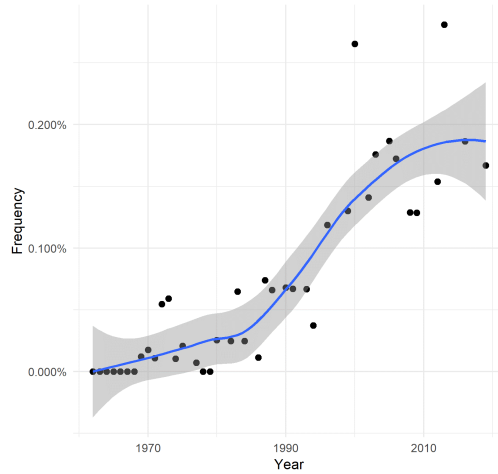
Structural reforms

As suggested above, the increased focus on structural reforms in the *Surveys* after 1994 was primarily directed at the labor market. The 1996 *Survey*, for example, contains a box in which the OECD recommended several Danish labor market reforms (OECD 1996, 96–97). It noted that structural unemployment is between 9 and 10 percent, and to prevent unemployment persisting at this rate a wide range of reforms were needed. Some of these reforms, in the sphere of taxation, income benefits, and wage structures, involved a trade-off between the creation of new incentive structures and a scaling back of the universal benefit system.

In the early 1990s the *Surveys* began to focus increasingly on the importance of incentives (see Figure 5). Especially the Danish welfare system caught the attention of the OECD. Its “generosity” was said to cause “high reservation wages” (OECD 1996, 91). “Generous transfer schemes...contributed to relatively high unemployment among low-skilled labour” (OECD 1999, 61). Disincentives embedded in present transfer schemes “undoubtedly contribute to marginalisation and benefit dependence among low-wage workers,” and “disincentives are also evident in schemes pertaining to older workers” (OECD 1999, 69). The 2000 *Survey* suggested that “further action will be required to stimulate labour force participation and increase average effective working time. Besides a reconsideration of the transfers system, this should include a reduction of marginal income tax rates, in particular in the income brackets above the level of unemployment benefits in order to strengthen work incentives further” (OECD 2000, 106).

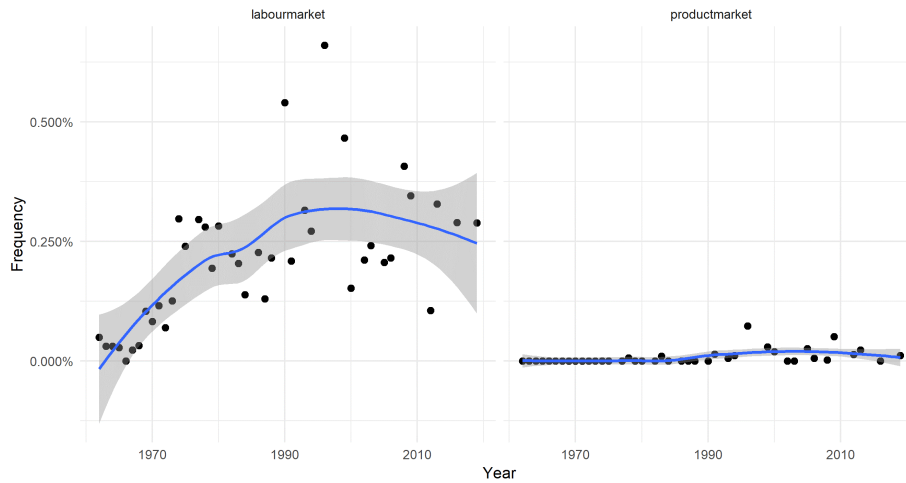
According to a leading textbook on macroeconomics, structural unemployment is influenced in two principal ways: structural policies aimed at the labor market and structural policies aimed at product markets (Blanchard et al. 2017). That is also the view found in the 1996 *Survey*, which provided a broad program of action for Denmark aimed at lowering the country’s high level of structural unemployment. Policy recommendations included labor-market flexibility and product market competition. Figure 6 shows that the frequency with which the labor market is mentioned in the *Surveys* is much larger than that for product markets, but it could be that the product markets were treated using other terms.

Figure 5. Mentions of “incentives”



Note: Mentions of “incentives” \in {incentive, incentives, disincentive, disincentives}.

Figure 6. Mentions of “labour market” and “product market”



Note: Mentions of “labour market” \in {labour market, labour markets} and “product market” \in {product market, product markets}

What were the typical structural policies aimed at the labor market? The 1996 *Survey* recommended a reduction of the level and the duration of unemployment benefits as well as a reduction of the scope for early withdrawal. The 1999 *Survey* recommended “decisive action to address the disincentives to labour supply in the tax and transfer system,” it urged the government to take “steps to remove disincentives to continued labour-market participation for older workers,” and it noted that reform of “transfer and benefit schemes is crucial to the mobilisation

of labour for further economic growth” (OECD 1999, 85). According to the 2002 *Survey*, reducing “tax distortions on work incentives” should be the main objective of any future tax reform (OECD 2002, 55). And the 2000 *Survey* singles out a rise in the threshold for the top tax rate as probably the most efficient tax adjustment possible. That is, “the top tax rate discourages additional work for a large proportion of the work force, [and] it adds relatively little to total tax revenue. Put another way, significantly better work incentives could be achieved at a relatively small cost” (OECD 2000, 86).

The 1996 *Survey* also spoke of “the loss of economic efficiency incurred when pursuing an egalitarian strategy” (OECD 1996, 43). The 2002 *Survey* argued that “with absolute and relative poverty being largely absent, there may be a strong case for undertaking reforms that would help the economy function better, even if these are likely to widen the income distribution somewhat in the short run. This is particularly the case if the greater dispersion results from increasing incomes for middle- and high-income wage earners without negative effects on low-income groups” (OECD 2002, 52). It later provided the following recommendation: “Welfare gains from structural reforms should be allowed, more often, to take precedence over keeping static measures of inequality at current low levels. This is particularly relevant where reforms might benefit high-income groups the most but with little, or no, effect on low-income groups” (ibid., 84).

Education

Prior to the 1990s education was mentioned very infrequently. But in 1990 there was a sharp uptick in the frequency of mentions of education in the *Surveys* (see Figure 7).¹⁶ The decision to make education a focus area appears to have been taken with two principal labor market ends in view: increasing the effective labor supply by making students complete their studies faster and improving the quality of the labor force.

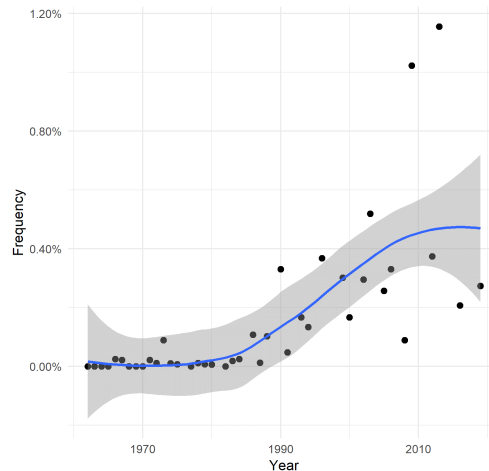
The 2000 *Survey* called for a “strengthening of economic incentives to complete education more quickly” (OECD 2000, 85). It recommended that the introductory school year prior to primary school should be made compulsory and that its educational content should be strengthened.¹⁷ The 2003 *Survey* recommended

16. OECD has become one of the most significant international organizations active in education policy. The OECD’s breakthrough as an education organization was mainly established by the PISA survey (Jacobi 2010).

17. The 2009 *Survey* noted that there is scope for improvement in early childhood education. More or less all Danish children attend kindergarten from age 3. However, the educational component of kindergarten was said to be too limited. This is unfortunate as “the returns to investment in early childhood education are higher than in the later stages of education” (OECD 2009, 106). As six-year-olds attend the preschool

that passage through education be accelerated. “Lowering the age of full entry into the labour market would not only add to the effective labour supply but would also be cost-effective and welfare-enhancing” (OECD 2003, 10). The 2003 *Survey* also said that the government could reshape the economic incentives by having students bear a greater part of the cost of their education, which will encourage them to undertake studies more efficiently. Moreover, it noted that from a purely economic perspective it is reasonable that individuals bear some portion of costs “as it has been widely demonstrated in many countries that higher education generates benefits mainly to the individual, rather than to society as a whole” (ibid., 54). The 2006 *Survey* recommended that a system whereby grants and tuition costs are subject to repayment after graduation should be developed. This would “make the tertiary sector more dynamic” (OECD 2006, 9). The 2009 *Survey* said that introducing tuition fees should “make universities more responsive to student and employer preferences and generate efficiency gains” (OECD 2009, 116).¹⁸

Figure 7. Mentions of “education”



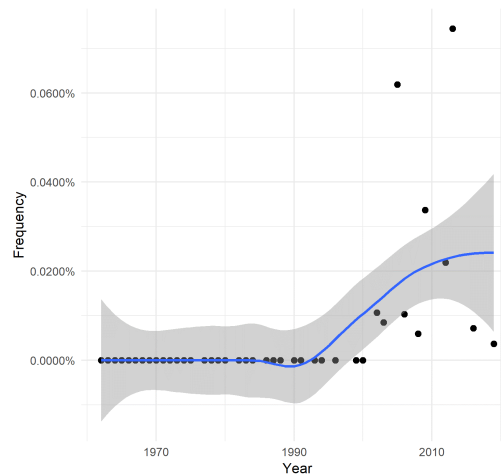
Another focus has been the education system’s efficiency. The 2002 *Survey* argued that there was ample scope for “improving outcomes of tertiary education

class, a further strengthening of its educational content would mean that primary education starts one year earlier than today. This would reduce the need for the voluntary 10th year, the result being that graduation happens a year earlier, and so effective labor supply goes up.

18. The importance of “responsiveness” to the demands of the labor market has gained traction. The view that education must be economically practical, preferably culminating in a high-paying job, is widespread. Universities seek to provide practical “learning outcomes,” either by introducing new programs aimed at making students immediately “employable” or by re-orientating existing studies to tout their economic relevance (Deneen 2018).

by improving quality within existing resources” (OECD 2002, 46). The 2003 *Survey* noted that the “Danish compulsory education system is one of the most costly per pupil in the OECD, and yet it has delivered lacklustre results” (OECD 2003, 59), where results refer to the OECD’s PISA assessments of reading skills, science, and mathematics.¹⁹ Consequently, if other countries can produce superior outcomes with fewer resources, Denmark should be able to improve the efficiency of the education system within the present resource allocation. The exact same message is repeated in the 2005 *Survey*, but there it is spiced up with the promise that Danish productivity growth will “benefit from an improvement in the compulsory education system” (OECD 2005, 39). The frequency of mentions of PISA scores is shown in Figure 8.

Figure 8. Mentions of “PISA”



Note: PISA assessments first started in 2000.

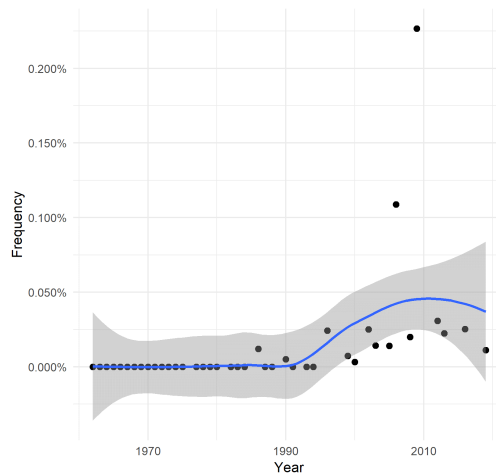
The 2009 *Survey* proposed that the government should increase transparency about labour market prospects associated with alternative educational choices. The OECD was firmly committed to the view that economic incentives are important for educational choices. Young Danes were saying they base their choice of what to study much more on personal interests than on job and earnings prospects, yet the 2006 *Survey* responded: “Such statements... may to some extent reflect that young people are well aware that net earnings do not vary that much by education, so that in their constrained optimisation, they focus on other aspects. The following analysis therefore proceeds on the assumption that economic incentives have at

19. PISA constitutes a standardized instrument for the evaluation of fifteen-year-old pupils in participating countries. It tests their ability in reading, mathematics, and science at three-year intervals.

least some effect on human capital acquisition” (OECD 2006, 92).

According to OECD thinking, policies in the area of education should have been “encouraging students to choose courses carefully, complete them expeditiously and start earning quickly” (OECD 2003, 9), which would ensure higher productivity growth. Consequently, the OECD expounded a view of education as a tool for improving economic performance.²⁰ Education provides the individual with human capital, which in turn leads to greater wealth for the individual and ultimately society. The frequency of mentions of human capital is shown in Figure 9.

Figure 9. Mentions of “human capital”



Human capital theory has made education a top priority for policymakers (Gilead 2012). The OECD has taken a front seat in this development. The 2009 *Survey* observed that “[h]uman capital has traditionally been a strong point for the Danish economy, boosting income levels and the economy’s capacity to adjust, but there is room for improvement. The productivity slowdown...calls for a review of policies affecting the creation, allocation and use of human capital” (OECD 2009, 98). Furthermore, “given the vital importance of human capital for productivity and income growth,” the 2009 *Survey* proposed a long list of policies to improve human capital (ibid.). Among these were a strengthening of the educational content of pre-school classes, a strengthening of the “culture of evaluation” in the school system, an improvement of school management and incentives to get more value for resources, developing outcome measures and holding managers accountable,

20. Some (Gilead 2012; Deneen 2018) argue that instead of seeing people as ends to be served by economic processes the “human capital” view of education regards people as means for achieving economic goals.

and increasing transparency for potential students about the labor market prospects associated with alternative education choices. Interestingly, the importance of evaluation according to OECD thinking was that it “gives incentives to both students and teachers to perform better, but to be more effective it should come with higher pay flexibility for teachers and school managers” (OECD 2012, 59).

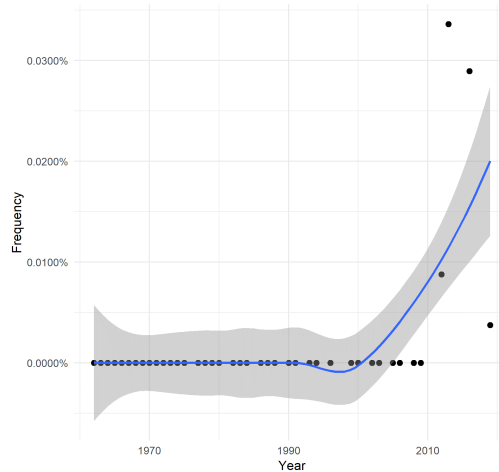
Macroprudential regulation

Prior to the 2008 crisis there was a widespread belief in the efficacy of monetary policy to stabilize the economy after a large shock. The belief was reinforced by the limited costs of the collapse of the 2001 technology bubble in global stock markets (Bayoumi 2017). By extension, there was no need to respond preemptively to potential bubbles in the mid-2000s. The 2008 crisis showed that this view was wrong.

After the 2008 financial crisis, therefore, the notion of macroprudential regulation rose to some prominence in the *Surveys* (see Figure 10). This is an approach to financial regulation that seeks to address **systemic risk**, the ultimate aim being the avoidance of macroeconomic costs linked to financial instability (Galati and Moessner 2013).²¹ A key systemic risk would be the building-up of asset price bubbles. When the prices of assets, such as houses, increase far beyond their intrinsic value, the risk of a sudden fall in those prices creates dangers, as Danish policymakers now know only too well. A macroprudential policy to address this problem would for instance be the introduction of more stringent caps on loan-to-value or loan-to-income ratios for deferred-amortization mortgages (OECD 2012). Thus, macroprudential policy focuses on the pricing of risk. It aims to act as a countervailing force to the endogenous decline in measured risk during an upswing and the rise in measured risk in the subsequent downturn (Galati and Moessner 2013).²²

21. Denmark set up a Systemic Risk Council composed of independent experts and representatives from official bodies, which is responsible for the identification of systemic risks in the financial system and the issuing of recommendations. Similar councils now exist in more than 40 countries (Aikman et al. 2019).

22. The notion of macroprudential regulation originates from the Bank of International Settlements (BIS). It was only picked up by academic economics after the 2008 financial crisis (Galati and Moessner 2013). As part of the 1996 Market Risk Amendment to Basel I, the Basel Committee on Banking Supervision (hosted by the BIS) condoned banks' use of their own internal risk models to calculate the capital buffers needed for the trading book. The Committee did so in the firm belief that market discipline would constrain bank risk-taking (Bayoumi 2017). It would therefore seem that macroprudential regulation is based on a market failure view, whereas the regulation of individual banks' market risk is rooted in a strong belief in the power of market discipline (counterparty surveillance).

Figure 10. Mentions of “macroprudential”

As for the concrete application of macroprudential policies, the 2016 *Survey* expressed concern that extremely supportive monetary policy in the euro area will create problems for the Danish economy, courtesy of the currency peg vis-à-vis the euro. “Should monetary conditions become out of line with the Danish business cycle, other policies such as fiscal and macroprudential need to be stepped up” (OECD 2016, 22). The central bank deposit rate has more or less continuously since 2012 been negative, again courtesy of the peg to the euro. As euro area monetary policy is likely to remain extremely accommodative, the 2019 *Survey* noted that “fiscal and macro-prudential policies become more crucial for stabilization” (OECD 2019, 30).

It would appear that the OECD has taken macroprudential policies fully on board. There is a slight irony to this. After all, macroprudential policy and incomes policy are not entirely unrelated. Both are premised on the belief that government officials can successfully intervene in the decentralized price formation process to circumvent what is perceived as unsustainable price developments.²³ Incomes policy was tried and found wanting, whereas the jury is still out on macroprudential regulation.

23. Macroprudential tools include bans on proprietary trading for systemically important banks, time-varying loan-to-value ratios, time-varying limits to growth in individual types of exposure, limits to the extension of credit based on increases in asset values, and providing regulators with the power to break up financial firms on systemic risk concerns (Galati and Moessner 2013).

Concluding remarks

Using word frequencies, I have documented sporadic fads, persistent trends, and even a recurrence in OECD economic thinking. On the one hand, changes in economic thinking might be thought to represent a maturing of the science. Few would probably counter that the adoption of the natural rate hypothesis represented an improvement vis-à-vis the earlier Keynesian framework. On the other hand, pre-crisis blunders and post-crisis turnarounds in thinking on matters of monetary policy and financial stability may well show that the science of economics remains immature. Add to this that leading economists have argued that the economics profession has been unprofessional by not emphasizing the downsides of globalization for fear of strengthening populism (Rodrik 2015; Collier 2018).

Perhaps for these reasons public trust in the economics profession is at an all-time low (Collier 2018; Pisani-Ferry 2016; Thoma 2016).²⁴ In the current political climate, where unproven economic ideas such as universal basic income, modern monetary theory, and a Green New Deal are circulating, we may all suffer the consequences of an enfeebled economics profession.

Going forward, what should economists do? Roger Backhouse (2010) argues that economic thinking is most powerful when problems are narrowly and precisely defined and when agents' motivations are well known;²⁵ it works less well when wider issues, involving politics or social phenomena, are involved.²⁶ Perhaps a way out of the current predicament is for economists to focus more on what they according to Backhouse do well. And perhaps they should better convey the uncertainty that accompanies their analyses, particularly when doing what they do less well.

Data and code

Data and code for this research may be downloaded [here](#).

24. A price of being the most politically influential social science is mockery when things go wrong (Fourcade et al. 2015).

25. Notable successes that fit this description are telecommunication spectrum auctions, creation of permits to pollute, congestion pricing, the Black-Scholes formula, and central bank independence.

26. Notable failures include the Russian transition to the market, numerous attempts at engineering third-world economic development through development aid, and the European Monetary Union.

References

- Aikman, David, Jonathan Bridges, Anil Kashyap, and Casper Siegert.** 2019. Would Macroprudential Regulation Have Prevented the Last Crisis? *Journal of Economic Perspectives* 33(1): 107–130.
- Backhouse, Roger E.** 2010. *The Puzzle of Modern Economics*. Cambridge, UK: Cambridge University Press.
- Bayoumi, Tamin.** 2017. *Unfinished Business*. New Haven, Conn.: Yale University Press.
- Bholat, David, Stephen Hansen, Pedro Santos, and Cheryl Schonhardt-Bailey.** 2015. Text Mining for Central Banks. *Centre for Central Banking Studies Handbook* 33. Bank of England (London). [Link](#)
- Blanchard, Olivier.** 2018. Should We Reject the Natural Rate Hypothesis? *Journal of Economic Perspectives* 32(1): 97–120.
- Blanchard, Olivier, Alessia Amighini, and Francesco Giavazzi.** 2017. *Macroeconomics: A European Perspective*, 3rd ed. Harlow, UK: Pearson.
- Chernomas, Robert, and Ian Hudson.** 2017. *The Profit Doctrine: Economists of the Neoliberal Era*. London: Pluto Press.
- Collier, Paul.** 2018. *The Future of Capitalism: Facing the New Anxieties*. London: Allen Lane.
- Deneen, Patrick J.** 2018. *Why Liberalism Failed*. New Haven, Conn.: Yale University Press.
- Fourcade, Marion, Etienne Ollion, and Yann Algan.** 2015. The Superiority of Economists. *Journal of Economic Perspectives* 29(1): 89–114.
- Friedman, Milton.** 1968. The Role of Monetary Policy. *American Economic Review* 58(1): 1–17.
- Galati, Gabriele, and Richhild Moessner.** 2013. Macroprudential Policy—A Literature Review. *Journal of Economic Surveys* 27(5): 846–878.
- Gilead, Tal.** 2012. Education and the Logic of Economic Progress. *Journal of Philosophy of Education* 46(1): 113–131.
- Hirschman, Daniel, and Elizabeth Popp Berman.** 2014. Do Economists Make Policies? On the Political Effects of Economics. *Socio-Economic Review* 12(4): 779–811.
- Keynes, John Maynard.** 1936. *The General Theory of Employment, Interest, and Money*. London: Macmillan.
- Mankiw, N. Gregory, and Ricardo Reis.** 2018. Friedman’s Presidential Address in the Evolution of Macroeconomic Thought. *Journal of Economic Perspectives* 32(1): 81–96.
- Marcussen, Martin.** 2002. *OECD og idespillet: game over?* Copenhagen: Hans Reitzels Forlag.
- Organisation for Economic Co-operation and Development (OECD).** Various years. *OECD Economic Surveys: Denmark*. Paris: OECD. [Link](#)
- Organisation for Economic Co-operation and Development (OECD).** 1994a. *The OECD Jobs Study: Facts, Analysis, Strategies*. Paris: OECD.
- Organisation for Economic Co-operation and Development (OECD).** 1994b. *The OECD Jobs Study: Evidence and Explanations*. 2 vols. Paris: OECD.
- Ougaard, Morten.** 2010. The OECD’s Global Role: Agenda-Setting and Policy Diffusion. In *Mechanisms of OECD Governance: International Incentives for National Policy-Making?*, eds. Kerstin Martens and Anja P. Jakobi, 26–49. Oxford: Oxford University Press.
- Pisani-Ferry, Jean.** 2016. Why Are Voters Ignoring Experts? *Project Syndicate* (Prague), July

1. [Link](#)

- Pries, Michael J.** 2008. Natural Rate of Unemployment. In *The New Palgrave Dictionary of Economics*, 2nd ed., eds. Steven Durlauf and Lawrence E. Blume. London: Palgrave Macmillan.
- Rodrik, Dani.** 2015. *Economics Rules: The Rights and Wrongs of the Dismal Science*. New York: W. W. Norton.
- Sandel, Michael J.** 2012. *What Money Can't Buy: The Moral Limits of Markets*. London: Allen Lane.
- Silge, Julia, and David Robinson.** 2017. *Text Mining with R*. Sebastopol, Calif.: O'Reilly Media.
- Skidelsky, Robert.** 2018. *Money and Government*. London: Penguin.
- Swan, Trevor W.** 1963. Longer-Run Problems of the Balance of Payments. In *The Australian Economy: A Volume of Readings*, ed. H. W. Arndt and W. M. Corden, 384–395. Melbourne: F. W. Cheshire.
- Thoma, Mark.** 2016. Why the Public Has Stopped Paying Attention to Economists. *Fiscal Times* (New York), June 28. [Link](#)
- White, Lawrence H.** 2012. *The Clash of Economic Ideas*. Cambridge, UK: Cambridge University Press.
- Woodward, Richard.** 2010. The OECD and Economic Governance: Invisibility and Impotence? In *Mechanisms of OECD Governance: International Incentives for National Policy-Making?*, eds. Kerstin Martens and Anja P. Jakobi, 53–74. Oxford: Oxford University Press.
- Worswick, George D. N.** 1989. Full Employment. In *The New Palgrave: Social Economics*, eds. John Eatwell, Murray Milgate, and Peter Newman. New York: W. W. Norton.
- Zingales, Luigi.** 2014. Preventing Economists' Capture. In *Preventing Regulatory Capture: Special Interest Influence and How to Limit It*, eds. Daniel Carpenter and David Moss, 124–151. Cambridge, UK: Cambridge University Press.

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