In this lecture:

A **Inequality**

- 1. Why is inequality much higher in all advanced economies in knowledge era?
- 2. But much lower in export-oriented than finance-oriented?
- 3. And lower in some export-oriented economies than others (notably Nordic)?

B Innovation

- Positive complementaries between radical innovation in finance-oriented economies and incremental innovation in export-oriented economies.
- 2. If we are in age of innovation why is productivity growth so slow, and why are we concerned about secular stagnation?

Inequality:

Distinguish between <u>market inequality</u> – in incomes before taxes and transfers

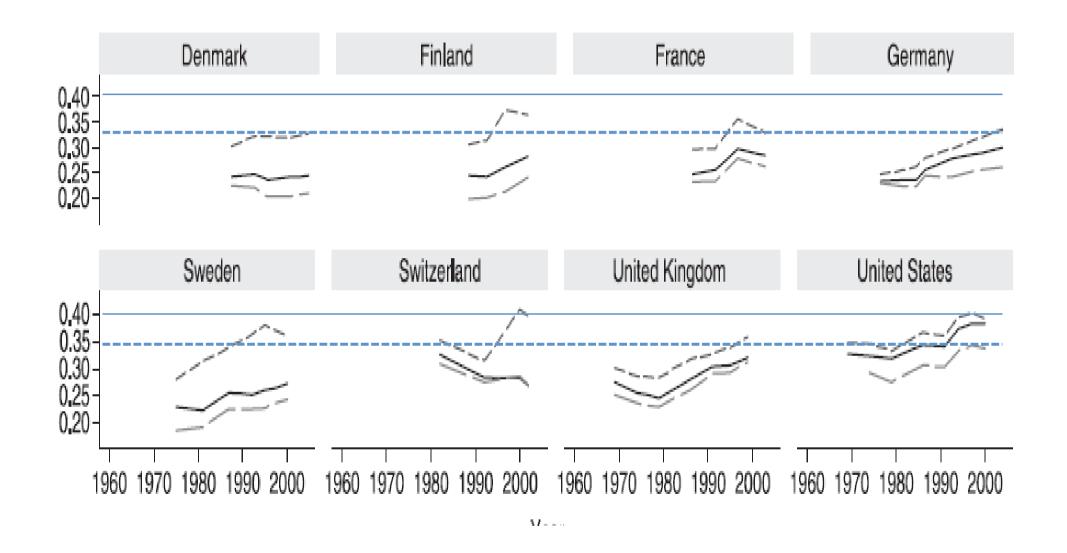
And inequality in disposable income – incomes after taxes and transfers

Difference is <u>redistribution</u>:

Transfers/benefits – Taxes

Market inequality determined in labour market

Redistribution determined in political system



Why increases everywhere in market inequality between Fordism and Knowledge economy?

Three reasons

(1) <u>Collapse of semi-skilled unions</u>. Low market inequality under Fordism because collective bargaining and unions very important; and covered semi-skilled as well as skilled

This reflected bargaining power of semi-skilled in Fordist assembly-line production

Those with low education & low cultural capital could get semi-skilled employment because cultural capital unimportant and only minimal education needed

Why higher market inequality (continued)

(2) Insiders and outsiders in Knowledge Economy

Good employment in knowledge economy requires both education + skills and cultural capital – high importance of communication across classes etc

Large % workforce 'upgraded' educationally and via training compared to their parents under Fordism. They are insiders in the knowledge economy.

But those from disadvantaged backgrounds especially with low education are outsiders in labour markets and get low pay reflecting low productivity Why increased market inequality (continued)?

(3) IT puts far more power in hands of individual employee in 'insider' employment, compared to standardised routine jobs of Fordist era – including lower management jobs etc

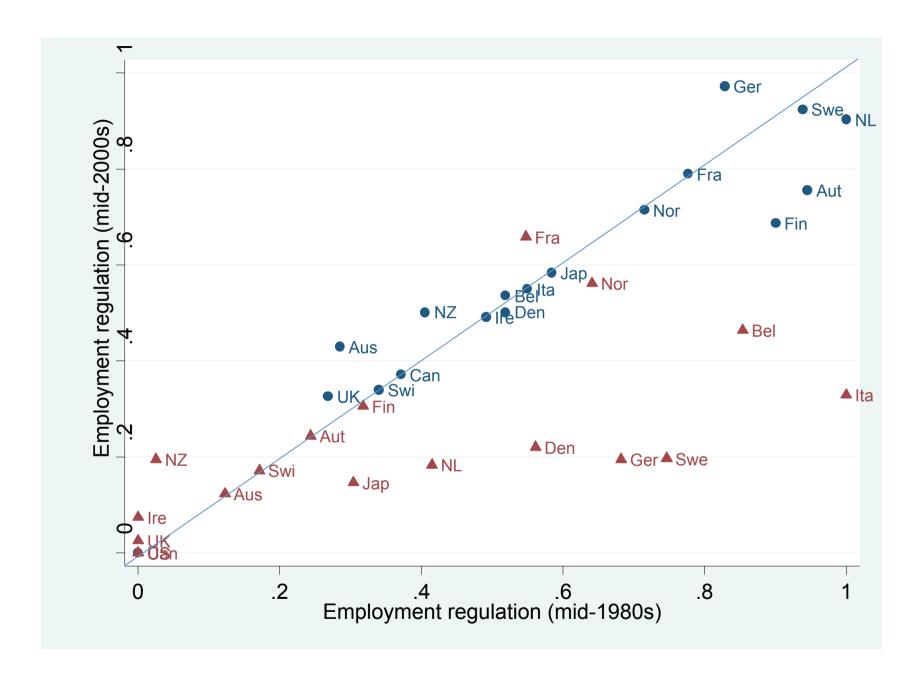
Therefore individual performance more important

Earnings used to <u>motivate</u> employees, to <u>retain</u> employees who perform well, and to <u>recruit</u> attractive new employees

This is somewhat less true of export-oriented economies

Because employment tenure, company attachment, group performance more important, individual incentivisation less important

If I make long-term commitment to company in terms of company-specific skills I want some guarantee of stable conditions re employment and earnings protection



What really matters for inequality is disposable income:

Redistribution depends on political system

We might loosely say:

Under Fordism collective bargaining in labour market played large part in providing reasonable incomes for low skilled; so redistribution not <u>so</u> important under Fordism

But in Knowledge economy, only political system can do that via redistribution

This should be good news for less well-off:

the Meltzer-Richard theorem tells us that the more unequal is market inequality, the greater the incentive for the median voter (who generally has below average income) to vote for redistribution

All our knowledge economies are vibrant democracies;

and the Meltzer-Richard theorem is almost the bestknown theorem of political science

but is the comforting Meltzer-Richard result true?

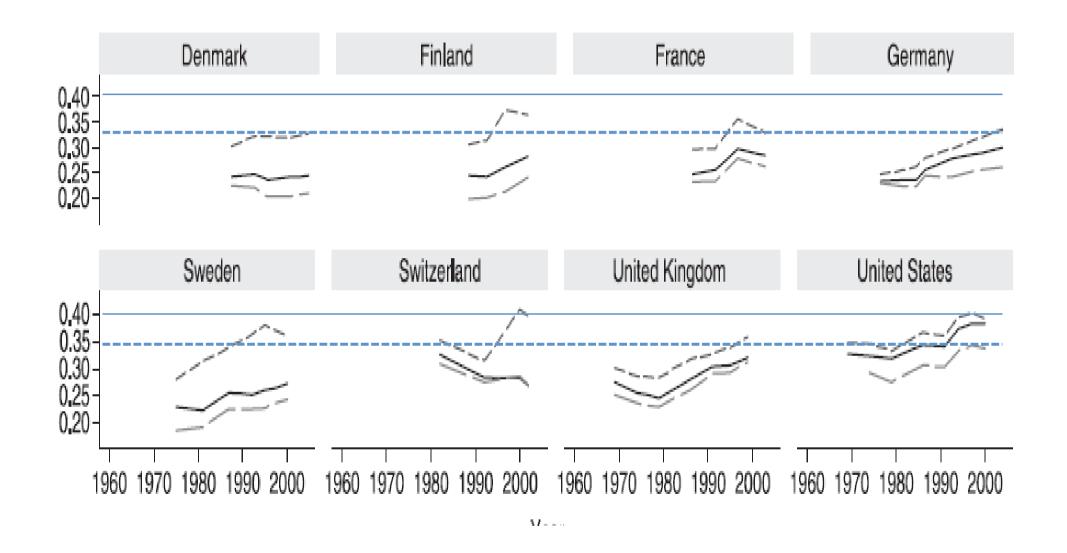
Real question for less advantaged is:

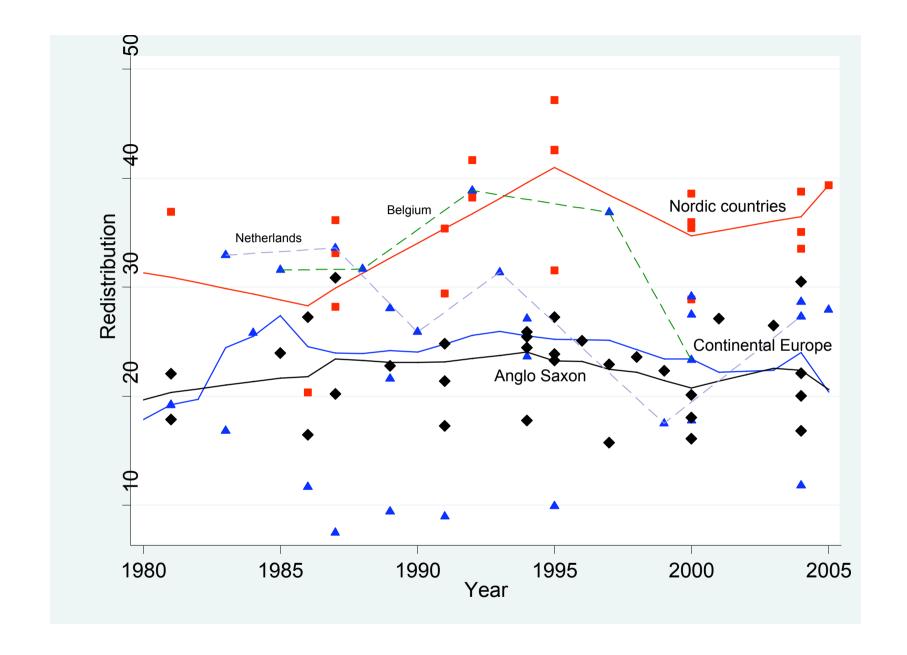
need representation at whatever bargaining table matters since flexible labour markets imply low wages equal to low productivity

so either union bargaining if union represents less/semi-skilled

or being represented by a political party where that party is member of government coalition

or is the party of government in single party government





Electoral system and number of years with left of centre and right of centre governments

		Government Partisanship		Proportion of
		Left	Right	Right Governments
Electoral system	Proportional	342 (8)	120 (1)	0.26
	Majoritarian	86 (0)	256 (8)	0.75

(pure centrist government years omitted)

This is broadly consistent with data that

- 1. Nordic followed by Continental countries (the export-oriented economies) both redistribute more than Anglo-Saxon Finance-oriented economies
- 2. Export-oriented economies are PR and Finance-oriented economies are Majoritarian

So, critically, is there a theory behind this result?

Possible Explanations

1. In majoritarian systems, both parties have to focus on median voter

median voter hostile to paying more taxes to redistribute to low income groups; worries that a Left party in power will do that – whatever they promise – therefore vote for Right party (worst that Right will do is lower taxes)

2. In PR systems, assume 3 parties, L, C, R; C is pivotal party and choose coalition with either L or R

L

C

R

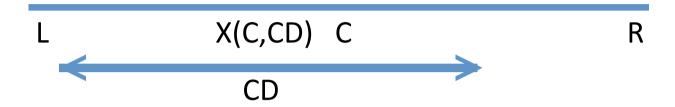
C chooses L because they can jointly screw the party representing rich voters, R

L X (C,L) C R

Why might continental states (Germany) be less redistributive?

Paradoxically they may a CD party rather than an important strong R party

Now C chooses CD



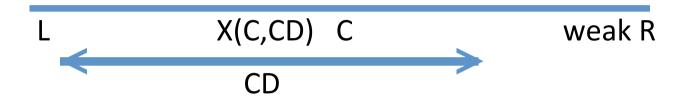
So this may explain why continental states (Germany) be less redistributive than Nordic?

Moreover, the Nordic countries are the exporting countries in which conservative R parties are relatively well defined

so the paradox is: a strong right party underpins a centre-left alliance

Paradox of Export-oriented coalitions

(i) Continental: weak right, strong encompassing party



(i) Nordic: strong right, no encompassing party

L X (C,L) C strong R

But why can't parties reposition themselves? Why can't R parties say in Nordic countries move close enough to C to be a more attractive coalition partner than L?

Answer (until recently):

- parties in the export-oriented economies were very close to organised interest groups (business or unions or whoever);

so C fear was that once in government the external interests would force the R party leadership to go back on the bargain

But knowledge economy appears to be having two effects on parties in export-oriented countries:

(i) strong ties between large companies in the lesscompetitive Fordist era have weakened as I argued in last lecture

this has weakened business organisations in export-oriented economies

and this has enabled R parties in Scandinavia to become more leadership parties and to move to centre; this has led to centre-right coalitions across Scandinavia, and some limited cut back on redistribution (ii) perhaps disengagement of unions and hence social democratic parties from interests of less skilled

notable in Germany with break of of die Linke

(iii) and perhaps also true of disengagement of christian democracy from religious links, again allowing a move away from representation of the less skilled

These developments would not be good news for less skilled

Innovation

Finance-oriented economies comparative advantage in radical innovation, more so since knowledge economy

breakup of conglomerates (with big internal research departments) implied development of mobile labour markets of research scientists, software developers, Glaeser's skill clusters in cities; note that skill clusters and urban agglomeration tie researchers, also venture capitalists to particular geographic locations

this reinforced by American finance system as it has developed, with ties between investment banks and venture capitalists. and quick availability of high risk capital

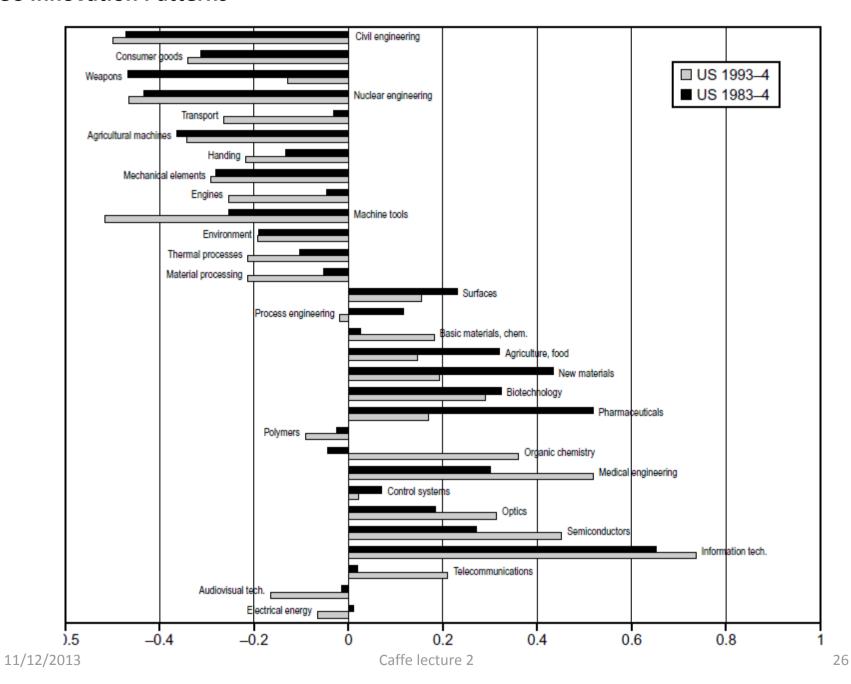
Export-oriented economies far less successful at radical innovation because good careers are longer-term in big companies

But expertise in incremental innovation

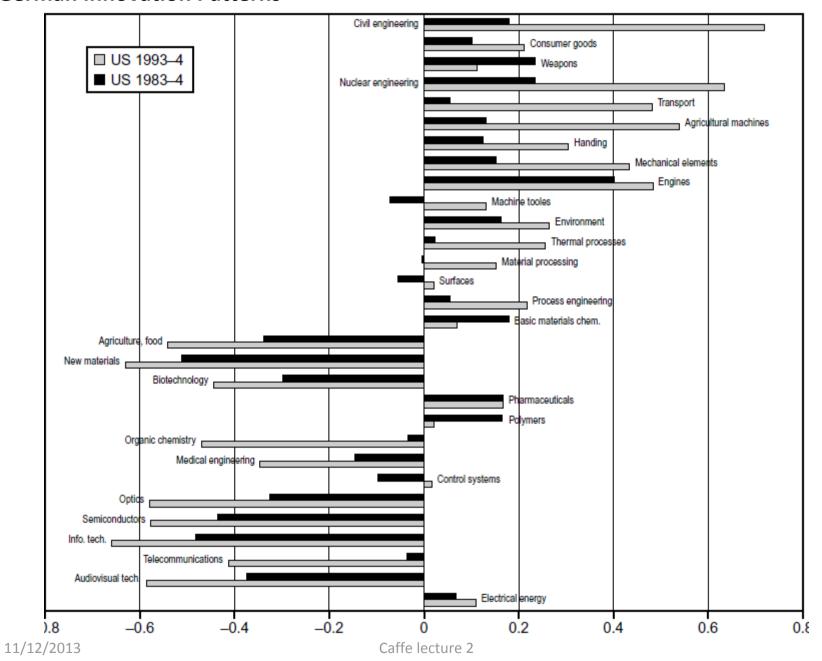
even in innovative sectors, such as software (emphasis on customisation) or in biotech (platform technologies not therapeutics)

clearly some of most effective innovation in world takes place in Germany, Sweden, Switzerland; but it is incremental, building on established company competences and university-company links; not radical

US Innovation Patterns



German Innovation Patterns



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Innovation Positive Complementarities between Export and Finance oriented

Export-oriented MNCs buy subsidiaries in UK and especially US to access radical innovations and incorporate them in their own incremental innovation environment

this stimulates return on radical innovations and vice versa;

hence by contrast to potentially negative complementarities (at least for rest of world) from macroeconomic management system, these complementarities beneficial

Questions:

Robert Solow asked: "We can see the software revolution all around us, so why can't we see it in the National Income Accounts?"

(i) Innovations (product modification generally) radically undermeasured by existing national accounting

Major leaps come on back of set of big innovations, and extraordinarily risky;

but in last 5-10 years

- social network software
- mobile internet accessing widespread
- cloud computing
- mass data analysis cheap and feasible
- effective security

William Janeway has suggested that the Nasdaq bubble supplied much of the money behind these

Software can take over in many areas when nonprofessional population is educated enough to learn procedures

- education
- health
- retail
- finance
- law
- media
- + driverless cars, almost free genetic mapping, nanotechnology close to takeoff