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The UK experience with sectoral policies

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Outline

- Brief overview of UK position and policy
- Main examples of UK sectoral policies
  - Technology strategy board
  - Enterprise Zones
- Should the UK have a new industrial policy?
  - current debate and evidence
  - are horizontal policies sufficient or is there a need for sectoral support?

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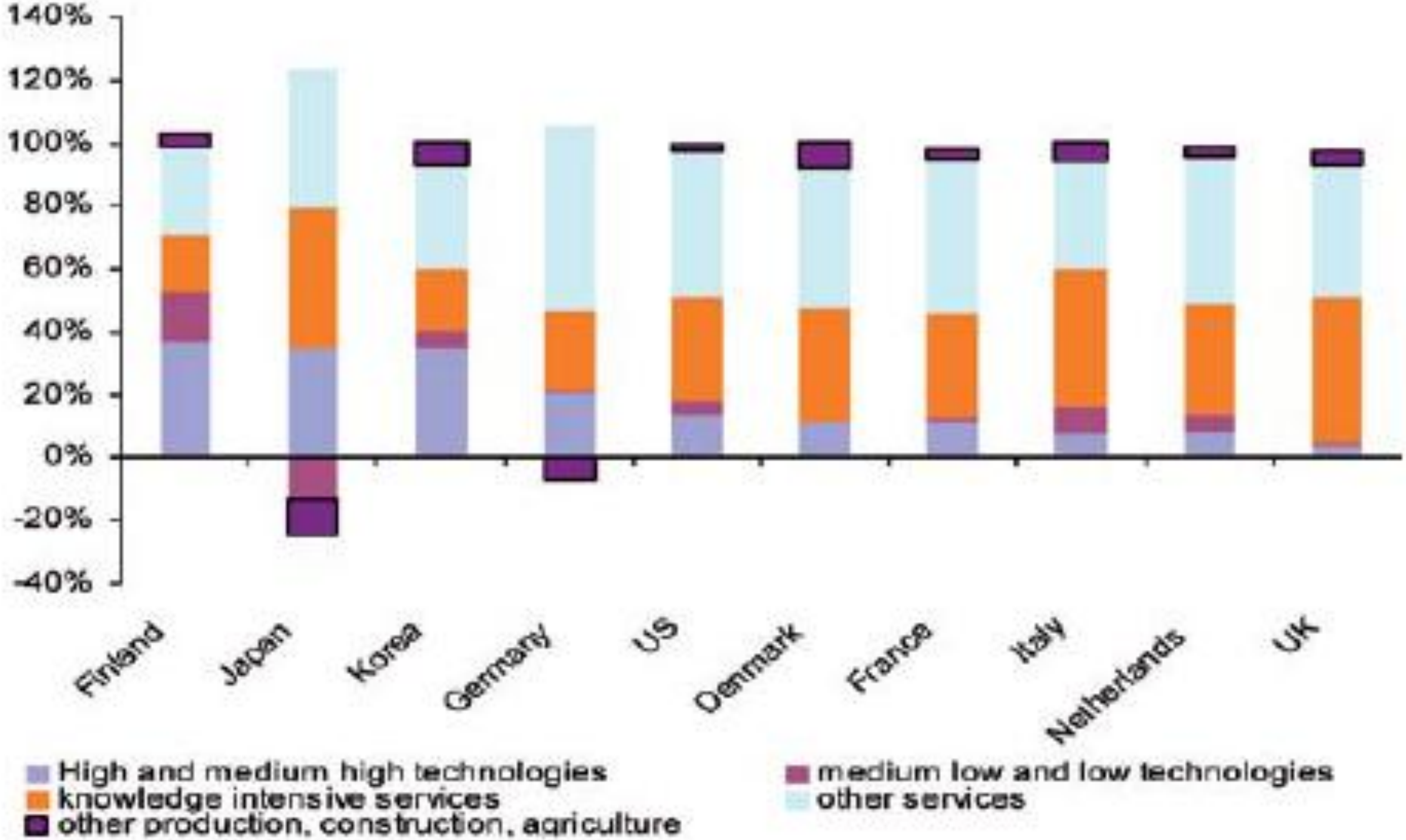
Features of the UK

- growth has come less from high/med tech firms and more from knowledge intensive sectors and service firms
  - since the mid 1990s investment is higher in intangible that tangible assets

Percentage contribution to growth in GVA, 1992-2007



Taken from BIS (2011a), based on OECD STAN database

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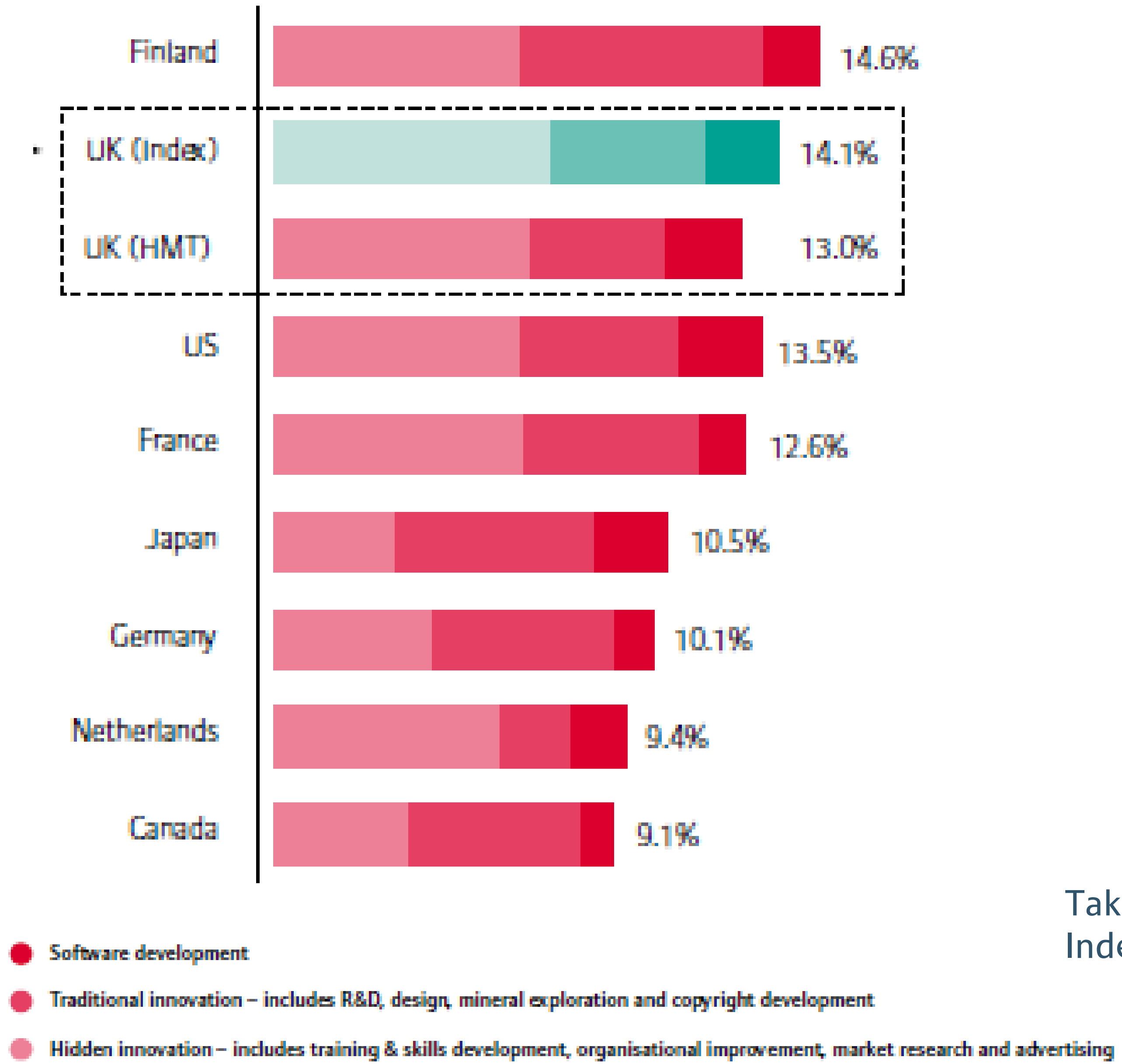
Investment in innovation; share of market sector GVA



Taken from Nesta Innovation Index (2009)

Features of the UK

- growth has come less from high/med tech firms and more from knowledge intensive sectors and service firms
  - since the mid 1990s investment is higher in intangible that tangible assets
- UK has a relatively strong science base
  - high share of publications and citations
  - science spending was increased under previous government
- large share of involvement of foreign investors and collaborators
- but notably low R&D intensity
  - 1.6% of GDP in 2007

UK policy motivation

- Motivation usually based on understanding of and focus on market failures
  - externalities; information asymmetries; institutional deficiencies; coordination failure; system failures
  - true of recent policy - 'Innovation and Research Strategy for Growth' (2011)

- Main policies have tended to be horizontal
  - higher education and skills; competition policy; infrastructure; regulatory framework ; IPR; tax policy
  - R&D tax credits and science budget account for larger spending than policies aimed at specific sectors
  - there a many smaller policies that have a sectoral flavour. Includes direct spending, advice and information, finance provision, prizes

What is the aim of sectoral policy?

- Two types of aims motivating sectoral policies
  - sector specific market failures
  - desires to encourage high growth potential sectors

- Example – support for UK biotechnology sector
  - support during the 1990s in the form of funding collaborative R&D, mentoring and advice , training grants, organising events
  - motivated by externalities / coordination failure / lack knowledge by new firms/ lack of economies of scale
  - true of a range of industries
  - evaluation suggests policies had some effect, but were not key determinants of UK's success

Technology Strategy Board

- Administers most policies with sectoral dimension
- “aim to help turn the emerging technologies of today into the growth sectors of tomorrow for UK business”
- *“develops technology strategies and makes choices on the allocation of funding to particular sectors markets and challenges, as well as to emerging technologies, by taking a strategic view of where UK capability exists and where future opportunities may emerge.”*

- Policies:
  - promote collaboration (invest in collaborative projects)
  - Knowledge Transfer Networks / Partnerships
  - direct investment in projects in ‘focus areas’
  - technology centres : Innovation and Knowledge Centres; Catapult centres

UK sectoral policies – comments

- Lots of relatively small polices - usually small sums of money
- Piecemeal approach
  - are policies targeting the same problem?
  - need to consider other policies (e.g. tax policy/ regulation)
- Policy changes regularly
  - hard for businesses to know what is available
  - often change in line with political cycles
- Lack of systematic evaluation

Regional policy - Enterprise Zones

- 21 new enterprise Zones (EZ) announced in 2011
  - aim: boost local growth and create jobs
  - features: 100% business rates relief for 5 years *(revenue cost 2014-15: £65m)*; simplified planning; support for fast broadband; potentially enhanced capital allowances and UKTI support.
  - each has a 'sectoral focus'

- *The UK had EZ from the early 1980s until mid 1990s*
  - *features: reductions in business rates, relaxed planning, often alongside infrastructure investment.*
  - *focused on areas with large patches of unused land – often where an industrial industry had closed.*

- Motivation – equity vs efficiency ?

Evaluation of Enterprise Zones

- EZ tended to increase firms and jobs, but this was largely the result of displacement from other neighboring areas
  - evaluations: PA Cambridge Economic Consultants (1995); Potter J & Moore B (2000); Jones C (2006)
- Per job the scheme was expensive
  - government-funded evaluation: cost of £23,000 per new job (PA Cambridge Economics (1987))
  - estimate for the original 11 zones: cost at £45,000 per new job (Schwarz and Volgy (1988))
- US states – most operate enterprise zones, each with slightly different focus & policies
  - evaluation mixed, some find some success. (Bondonio D & Engberg J (1999); Papke (2003) ; Busso M & Kline P (2007))
  - more focus on unemployment and low skills than on property and infrastructure

What did we learn?

- policy details are really important
  - EZ most likely to work when designed with a clear rational for government intervention
  - it matters where the zones are
    - "accessible" zones attracted highest proportion of inward investing firms (Potter & Moore (2000))
    - Canary Wharf identified as a success story

- Tax incentives can be effective, but are easily offset by other cost differentials
- *'Focusing public expenditure on "turning around" declining places has not worked; policy should instead focus primarily on people (e.g. through skills investment), improving incentives and removing regulatory barriers'* Henry Overman (LSE)

Other regional policies

- Regional selective assistance (RSA), 1972-2004
  - discretionary grant to private sector (manufacturing) firms for primarily capital investment projects
  - aims: address labour market inequalities; safeguard ‘at risk’ jobs;
  - became Selective Finance for Investment – increase productivity and proportion of skilled jobs
- BERR (2008)
  - positive effect of RSA on employment growth; increased productivity, skills & technical capability
- Criscuolo, Martin, Overman and Van Reenen (2012)
  - positive program treatment effect of RSA on employment, investment and net entry but not on TFP
- *Devereux, Griffith and Simpson (2007)*
  - positive but small effect in attracting new plants to specific areas
  - a region's existing industrial structure affects location of new entrants

A new industrial policy?

- Idea of a new industrial policy has gained prominence recently
- Aim to ‘rebalance the economy’
  - concerns that too much investment in financial and business services and not enough in tradable goods
- ‘*We shouldn't be shy about identifying our successful industries and reinforcing them’* - George Osborne , 2012 budget
- Sectors identified in ‘The plan for Growth’:
  - healthcare and life sciences; advanced manufacturing; construction; digital and creative industries; retail; professional and business services; the space industry; tourism
- What does sector support mean?

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Justification for govt intervention

- Traditional arguments against sectoral policies:
  - prevents competition, encourages governments to ‘pick winners’ (or losers)
  - often implemented without a clear justification
  - what can the government actually achieve (are there appropriate policy levers?), does it have more information than the market?
  - risk of capture and rent seeking

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Support for idea of an industrial policy

- Government … ‘needs to scan ahead to where Britain has comparative advantage in the growth industries of the future and do its level best to remove barriers to the growth of these sectors and to at all costs avoid putting up new ones.’

  John Van Reenen, LSE

- “If the EU is to grow and compete globally, there is a case for the European Commission to allow national or EU sectoral aid, if it is appropriately designed and governed to encourage the redirection of innovation and production. Horizontal support and sectoral aid for upstream research and development are on their own not sufficient to foster the transformation of the European economy.”

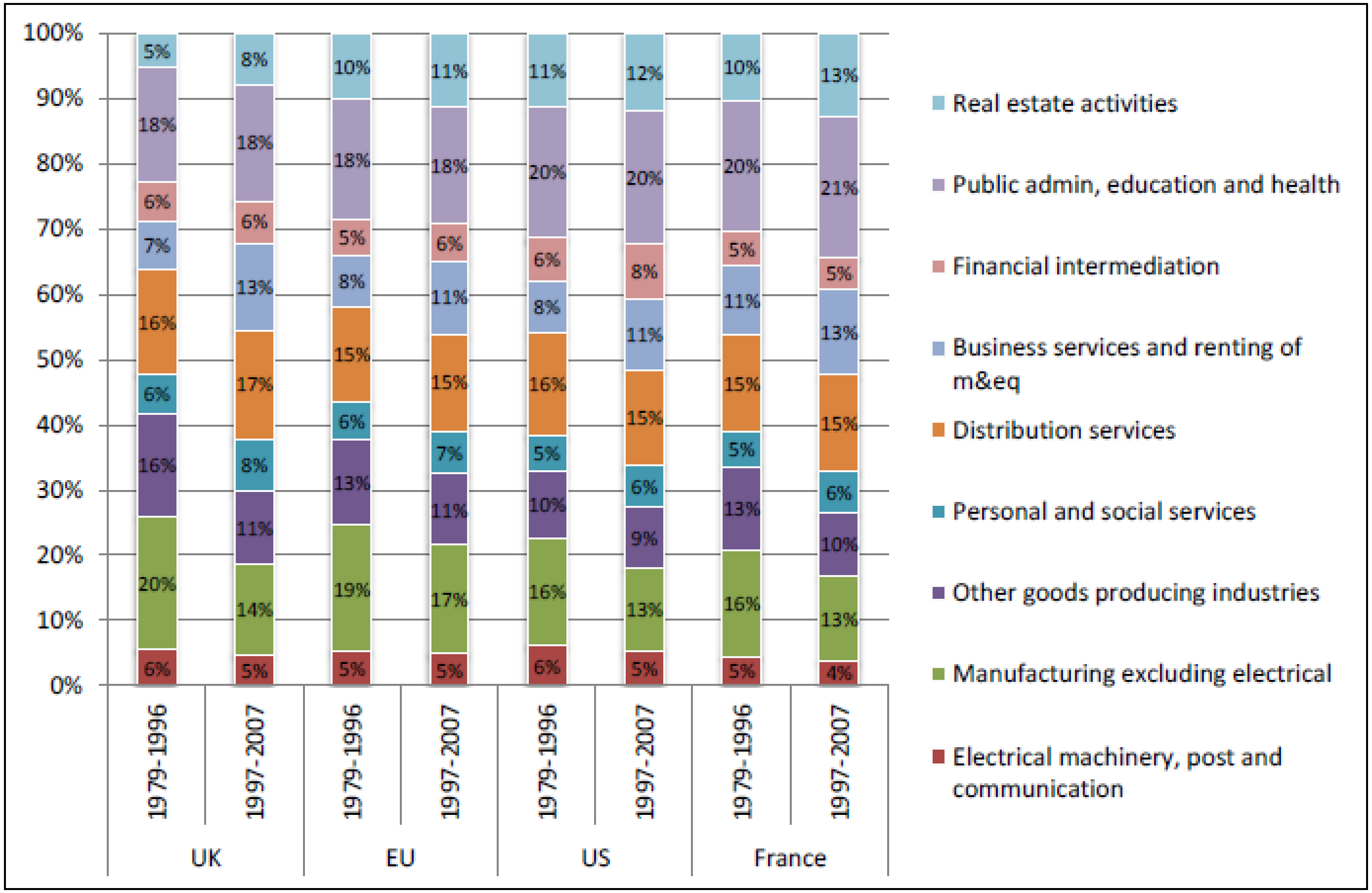
  Aghion, Boulanger, Cohen (2011)

Support for idea of an industrial policy

Philip Aghion (Havard) – need to rethink industrial policy. Why?

- climate change - role for government to redirect technical change (innovations are path dependent)
  - alongside a carbon price
  - remove subsidies for dirty energy
- credit constraints in high tech areas (intangible assets)
  - this will be true for a range of sectors
- China is a big (and successful) deployer of sectoral aid
  - need good evaluation of policies (why they worked and why they would be useful in other countries). Lots of examples of failure (Latin America)
  - are sectoral policies more important if other countries have them?
- inefficient growth of non-tradable sectors at the expense of tradables
  - what determines what counts as ‘inefficient growth’?
  - is an industrial policy the right solution?

Sector shares of total economy GVA



Notes: Data: EU KLEMS. EU represents all EU-15 countries for which growth accounting could be performed, i.e. AUT, BEL, DNK, ESP, FIN, FRA, GER, ITA, NLD & UK. Data for France and the EU are available from 1981 onwards. Market economy only.

Taken from Corry, Valero, Van Reenen (2011), Figure 4.

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Support for idea of an industrial policy

- Philip Aghion (Havard) – policy implications:
  - sectoral aid targeted at green tech/ skill intensive/competitive sectors
    - Nunn and Trefler (2010) find that tariff protection that is biased towards skill intensive sectors is positively correlated with productivity growth (~25% causation)
  - not biased towards individual firms & not at the expense of competition
    - Aghion, Dewatripont, Du, Harrison, and Legros (2012) consider Chinese firms and state aid . Find (i) the more competitive the sector the more positive the effect of subsidies on TFP growth and product innovation in that sector (ii) greater effect when state aid is less concentrated
    - export oriented as a way to encourage competition?
- Still (for the most part) grounded in rationale that there are knowledge spillovers / market failures
- More discussion is needed of the design of industrial policies

Discussion: a role for sectoral support?

- There may be some role for sectoral policies
  - especially where there are specific market failures / specific solutions
  - in effect many policies have a sectoral dimension

But:

- there are first order things that need to get right (e.g. skills)
  - UK: 10% real terms cuts to science base over next 4 years
- there needs to be a clear justification
  - whether horizontal policies are sufficient will depend on the problem
  - example - innovative firms in Germany and UK

Discussion: a role for sectoral support?

- is industrial policy the right tool?
  - how does a government identify sectors?
  - are the same solutions required for a range of sectors?
  - are there other policies that should be removed? (subsidies for coal)
  - do other policies target the same problem? (R&D grants and tax credits)
  - does the government have sufficient information and policy tools?

- what should a sectoral policy look like? How to design?
  - not at the expense of competition /broad based
  - which policies (direct funding/ information / prizes etc.)?
  - how long should support last (and what determines this)?
  - need to conduct and learn from evaluation

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Discussion: a role for sectoral support?

- consider interactions with other policies / country features

- limited benefits to plethora of small polices that change regularly
  - need an approach that considers government policy as a whole

- what role does the EU play?

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