

# Swiss Manufacturing: Why it still matters

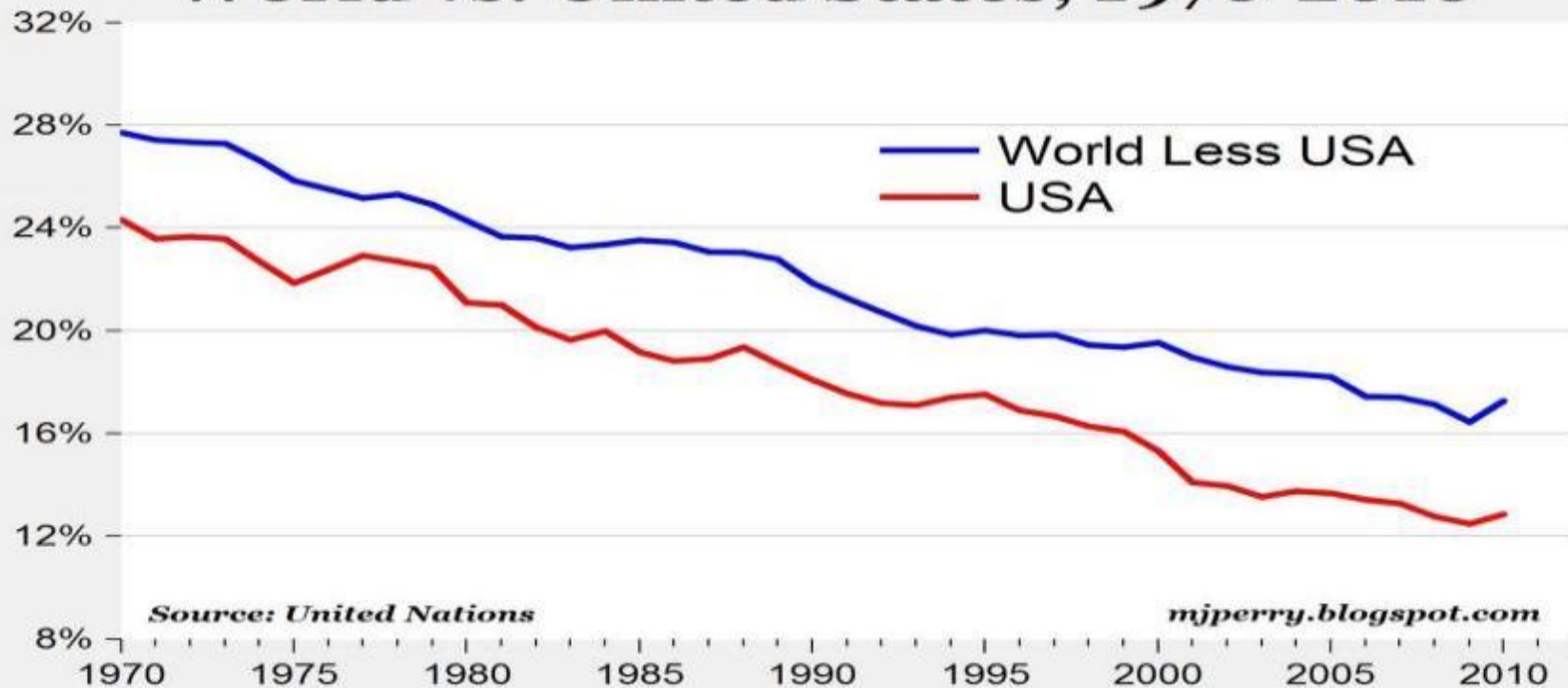
June 14<sup>th</sup>, 2012

Timothy Cline



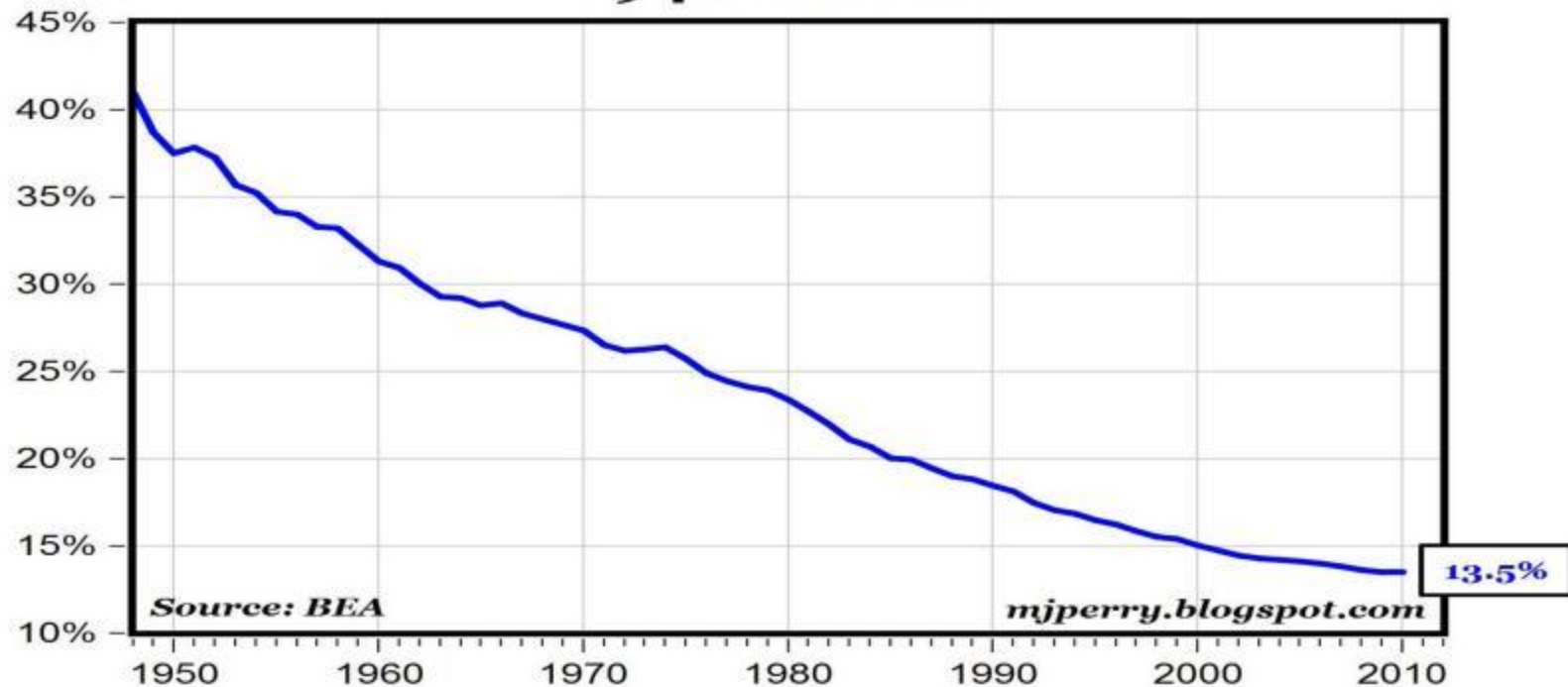
# Does it still matter?

## Manufacturing Share of GDP World vs. United States, 1970-2010



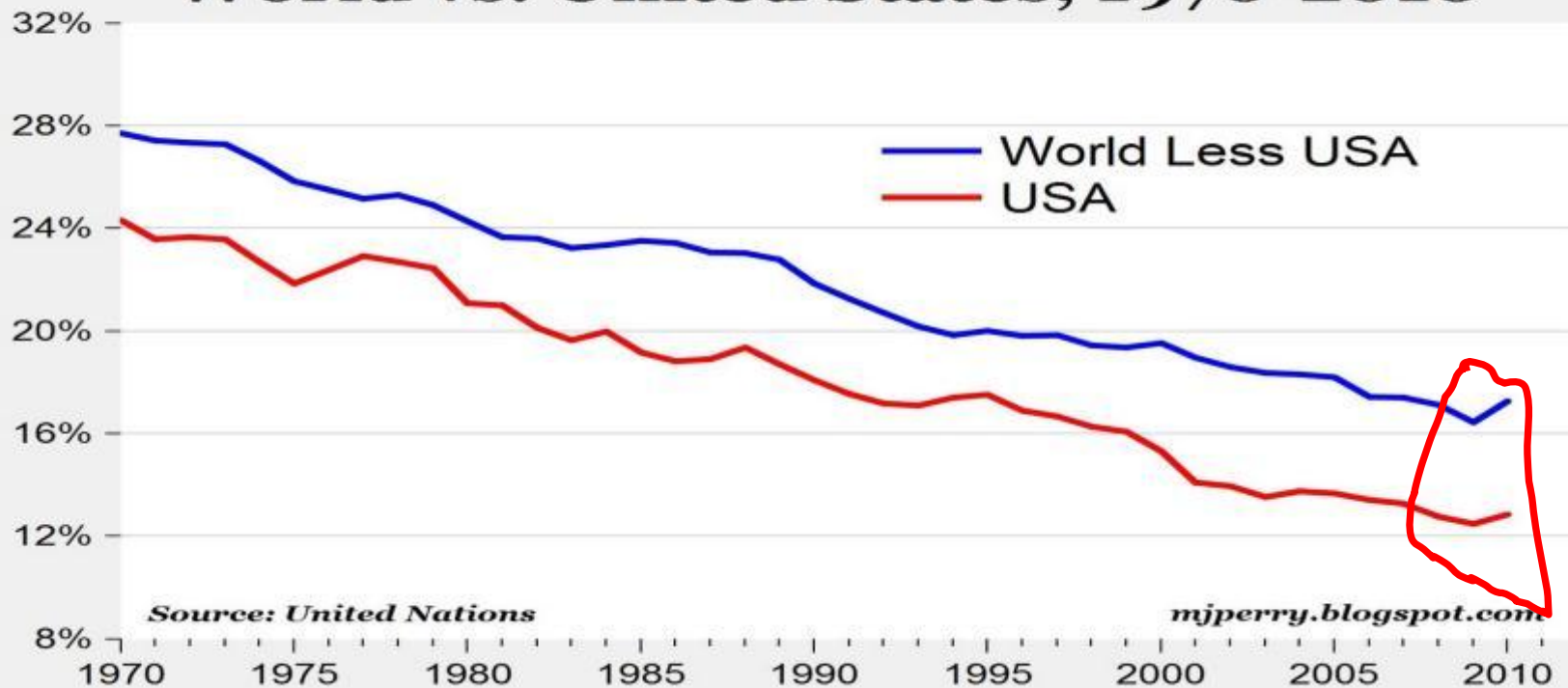
# Maybe not? Look at Productivity!

## Food, Clothing and Household Furnishings Share of Personal Consumption Expenditures 1948 to 2010



# But wait a minute...

## Manufacturing Share of GDP World vs. United States, 1970-2010



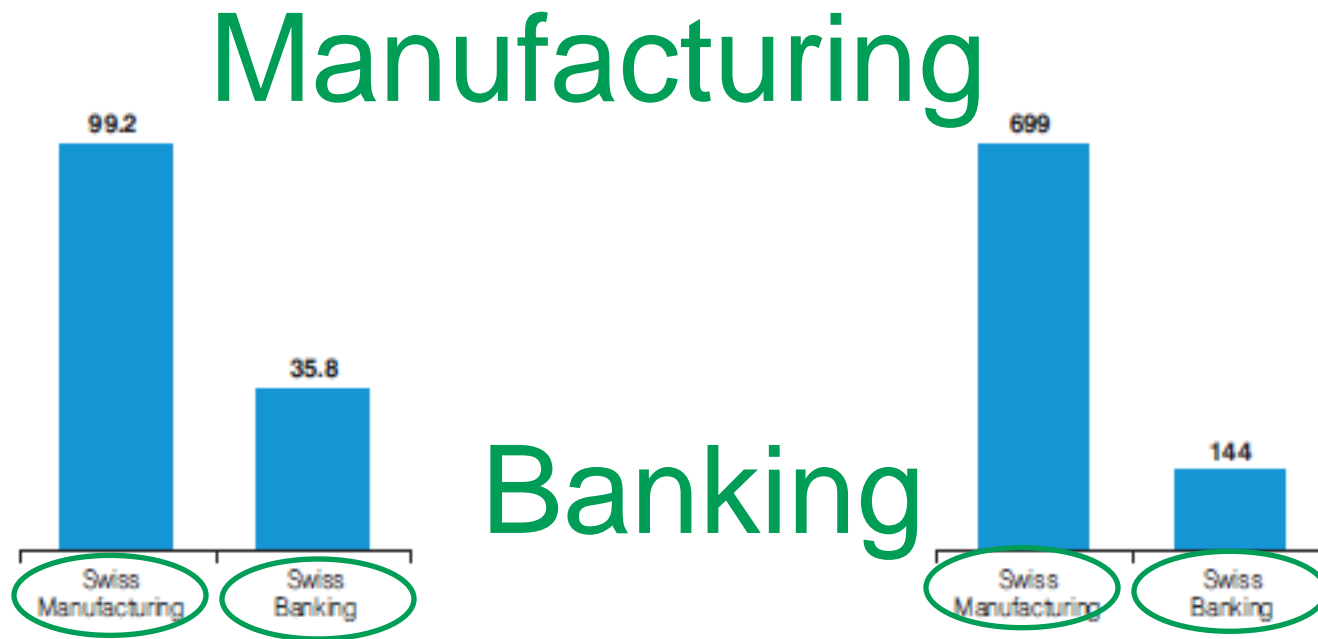
But What About Switzerland?



# Who adds more to the economy?

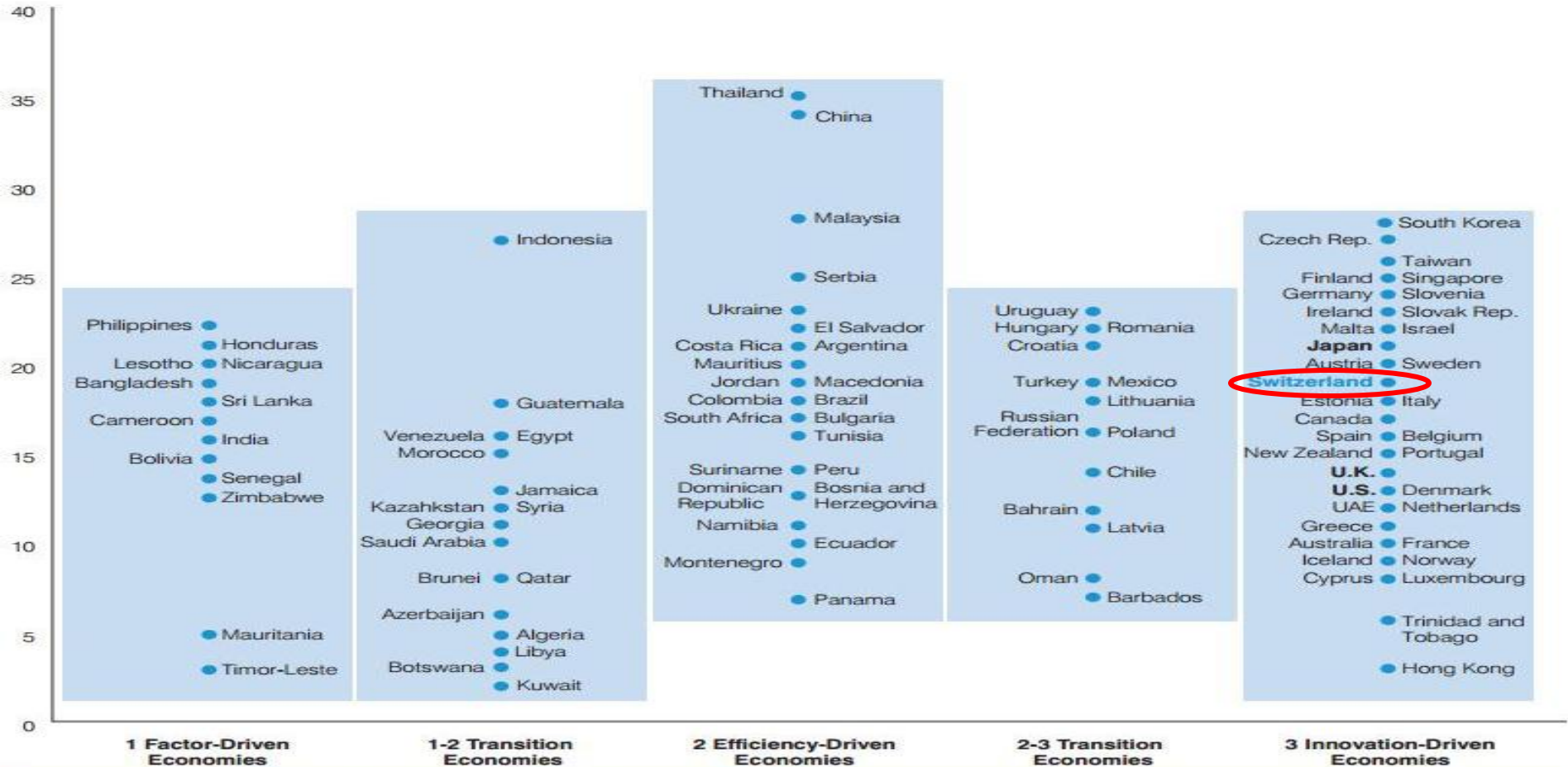
VALUE ADDED BY ECONOMIC SECTOR, 2009  
(in billions of Swiss francs)

EMPLOYMENT BY ECONOMIC SECTOR, 2009  
(in thousands of employees)



Source: SECO annual aggregates of GDP, production approach; Swiss Federal Statistical Office

# Manufacturing share of GDP

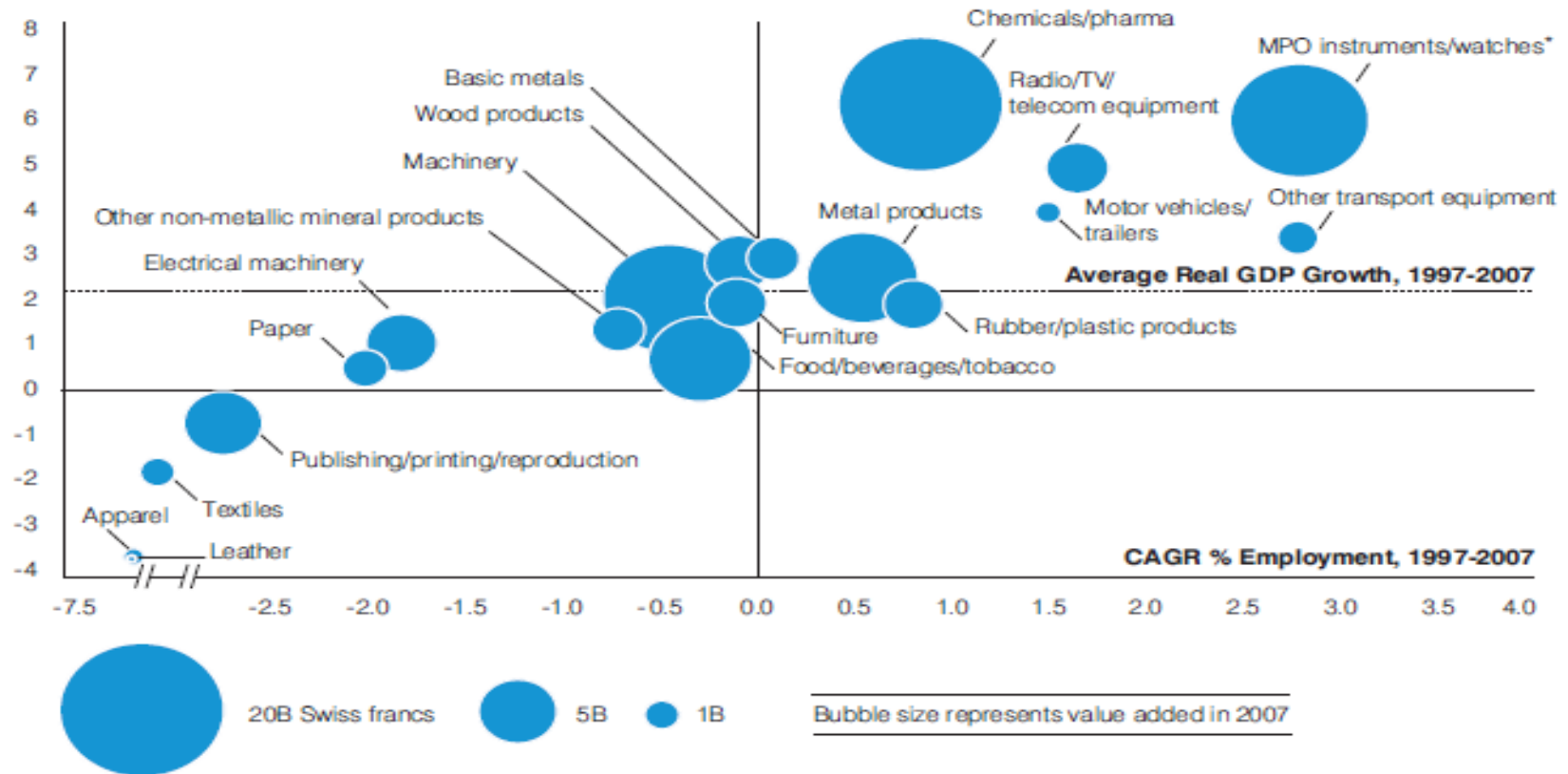


Note: Excludes countries with more than 20% of GDP contribution of agriculture sector.

Source: World Economic Forum's Global Competitiveness Report; Booz & Company analysis

# Swiss manufacturing industry growth

CAGR % Value Added, 1997-2007

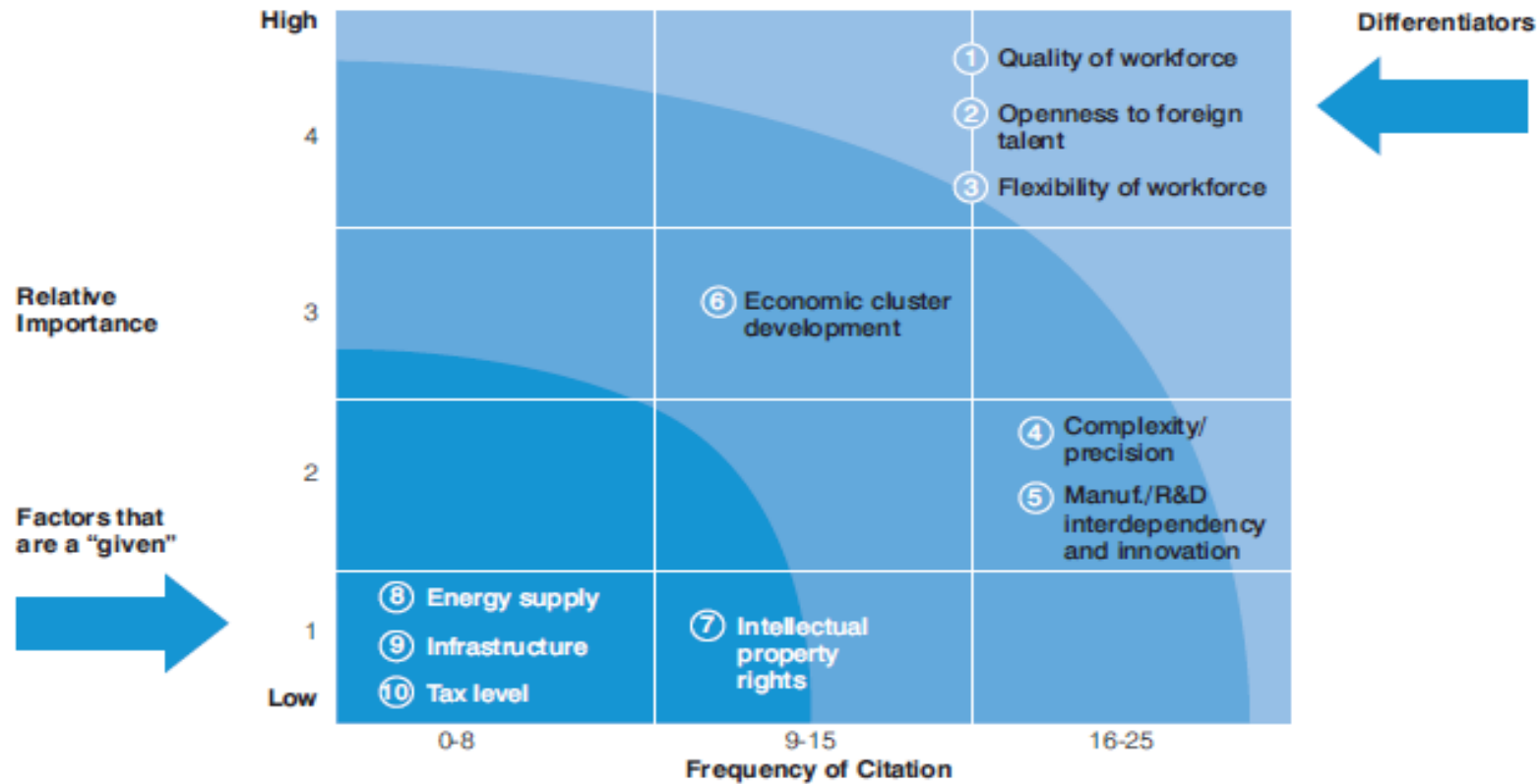


Source: Swiss Federal Statistical Office; Booz & Company analysis  
 \*MPO - Medical, precision, and optical



# Root causes of success

FREQUENCY OF CITATION VS. RELATIVE IMPORTANCE



Source: AmCham, Booz & Co

# What's going on?

## Seven secrets to success

### Environmental imperative

**What's happening:** companies use 'green' thinking to sell more products and invent new ones

**Who's doing it:**

**Interface (US)** is a large carpet maker that for the past decade has been a leader in using environmental standards as a way to sell more products. Of the company's sales last year of about \$1bn, roughly 90 per cent came from carpets sold with an 'environmental product declaration'. These provide an assessment of some of the environmental factors linked to the product's manufacture, such as energy use, production of waste and greenhouse gases.

### Cluster dynamics

**What's happening:** even as supply chains become more geographically diverse, manufacturers are becoming more reliant on certain 'clusters' of local suppliers and 'technology partners', many of them located in high-cost countries

**Who's doing it:**

**Panaz (UK)** is a world leader in making special fabrics that have properties such as fire resistance or ability to stifle bacterial growth. It has close links with about six technology and supply 'partners' near its base in Lancashire, in northern England. The six companies are part of a network of roughly 50 businesses around the world.

### Niche thinking

**What's happening:** changes in technology mean more business for boutique, specialist businesses with emphasis on design and top-flight manufacturing

**Who's doing it:**

**Freudenberg (Germany)** is a world leader in two specialised sectors: industrial lubricants and complex synthetic materials called elastomers, used in applications ranging from cars to healthcare. In each of these areas, Freudenberg sells about 30,000 different types of product.

### Networked manufacturing

**What's happening:** companies are making more effective use of global supply chains and talent, using people where they are most cost-effective geographically. This makes them more nimble at spotting trends

**Who's doing it:**

**Luxottica (Italy)** the world's biggest maker of spectacle frames, employs 200 designers in Italy, the US, China, Japan and Brazil. With its products being dependent on quick switches in global trends, Luxottica frequently changes the designs of its glasses, with half the 50,000 products made last year different from its output in 2010.

### Technological acceleration

**What's happening:** companies are becoming more adept both at improving individual technologies and using them in combination with others

**Who's doing it:**

**Komax (Switzerland)** is the world's biggest maker of high-tech machines for automating the production of wiring harnesses – the spaghetti-like tangles of wire that feature in electrical equipment ranging from computer control panels to washing machines. The machines cost up to \$1m and use a mixture of technologies including precision engineering, sensors and software. Combining skills in these different disciplines has made the mechanisms that thread the wiring more effective.

### Industrial democracy

**What's happening:** more countries have become capable of top-class manufacturing and product development, giving manufacturers greater choice over where to produce. China, now the world's biggest manufacturing country, has made the greatest strides

**Who's doing it:**

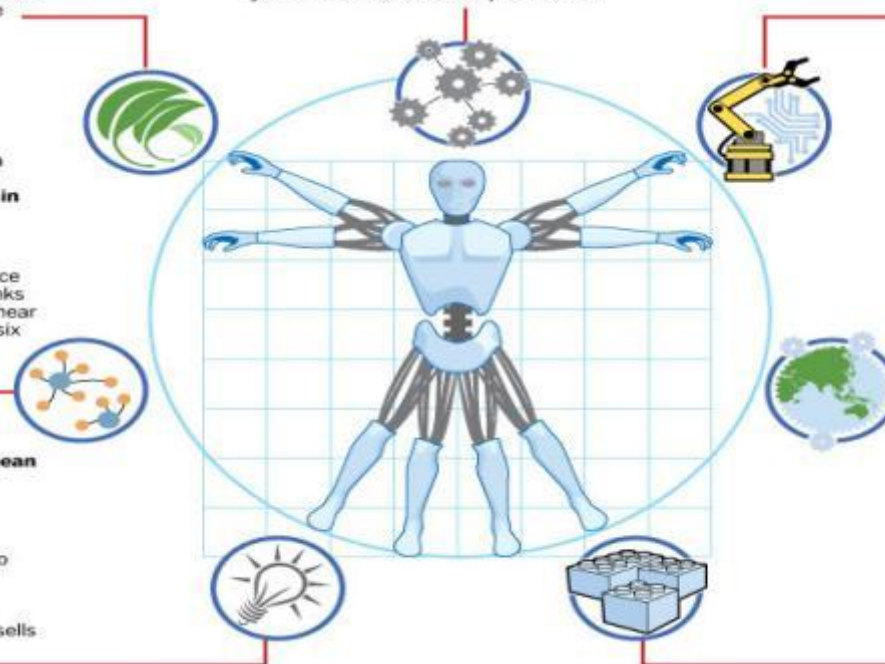
**Mindray (China)** the maker of medical equipment is a leading high-tech business from China. It has added a US marketing and development base to its Chinese operations. Mindray bases nearly all production in China because of low labour costs, while locating product development and marketing teams in the US, Sweden, Germany, the UK and India.

### Personalised production

**What's happening:** making things in small batches tailored to a customer, perhaps even one at a time, is starting to become routine

**Who's doing it:**

**Essilor (France)** is the world's biggest maker of lenses used in spectacles. Last year Essilor made more than 300m lenses, of which more than 100m were 'personalised' to correct for a person's sight depending on his or her physical characteristics.



Sources: Paul Baroch, IHS Global Insight, UIN, Stephen Broadberry, Angus Maddison, FT estimates

FT Graphics

# Personalised production

3D printing employing  
additive processes

Medical-grade titanium &  
micro-structures

Pioneered in Europe



# Cluster dynamics



Established Swiss image of Nespresso

Leveraged existing R&D and supplier network

Produce both machine & capsules

# Technological acceleration

Detector boards for digital mammography

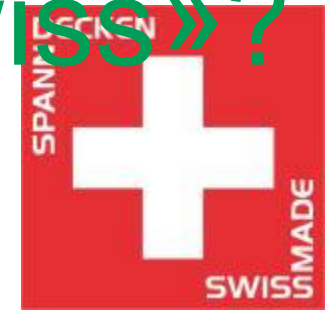
Ultra-miniaturization and full automation

Low labour content



But What About Swissness?

# How do I know what is «Swiss»?



swiss made  
software



# Swissness legislation

- Existing statutory rules unreliable
- New legislative amendment under review
- Amendment expected to benefit high-technology





# Indications of Swiss as source



Coat of Arms strictly reserved for the Confederation



Swiss made: Swiss label, association

The image shows the 'Swissness' logo, which consists of the word 'Swissness' in white on a grey background. The 'i' in 'Swiss' is replaced by a red cross.

Swiss Federal Institute of Intellectual property  
Made in Switzerland



Preferential origin of Switzerland

# Current state

## Swiss Content

- Minimum 50% of the production costs were incurred in Switzerland
- Not binding

## Includes

- Basic materials
- Semi-finished products
- Accessories, wages & overheads
- “Essential manufacturing process”

## Excludes

- Marketing & Distribution
- R&D
- Operating expenses
- Use of “Swiss” for commercial purposes

# Likely future state

## Classifications

- 60% of production costs in CH for industrial products **including R&D**
- Origin of natural products determined by place of extraction
- Processed natural products origin where processed

## Services

- Headquartered and administrative staff in CH

## *Ex ante...* protective actions

- National register for goods whose reputation or quality attributable to origin
- Geographical trademark for appellations of controlled origin



---

# THANK YOU!

[www.valtronic.com](http://www.valtronic.com)

# Threats & Conclusions

