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Intellectual Capital for  
Communities  
In the Knowledge Economy

# Intellectual Capital for Communities in the Knowledge Economy Emerging Worlds, Growing Intangibles



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# **Creativity and Economics**

**World Conference on Intellectual Capital For Communities  
June 6, 2013**

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**\*These are my opinions and not those of the  
Federal Reserve Bank of Philadelphia or the  
Federal Reserve System**

# Creativity and Economics

- **Since 1993, I have been measuring how the US and global economy have been affected by rapid innovation**
- **Three central questions**
  - **How has the rise of creativity changed the global economy?**
  - **How should the rise in creativity change economic thinking?**
  - **Does this have implications for policy?**



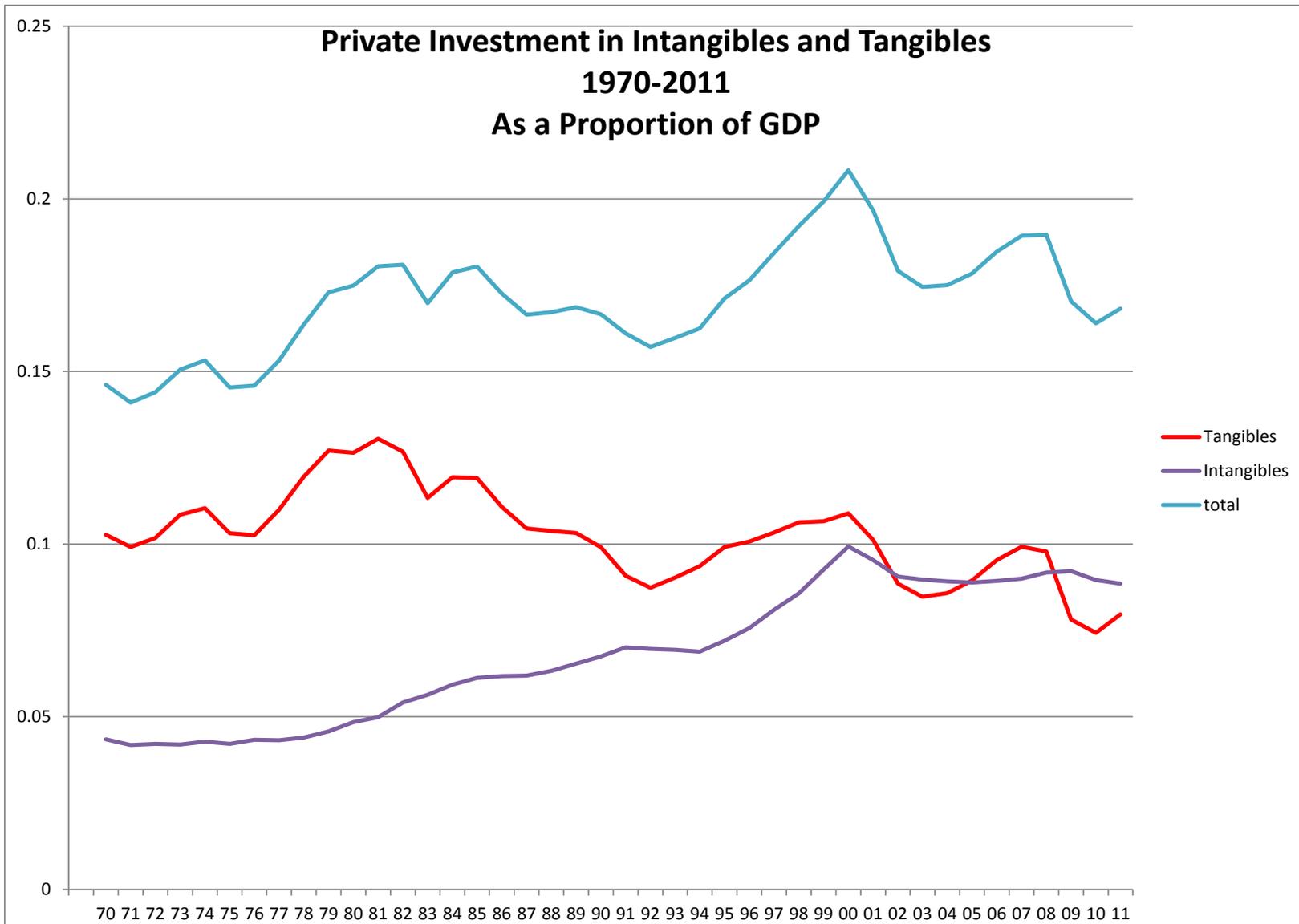
# How has the economy changed?

- **The global economy is less about making goods and producing services and increasingly centers around creativity: invention, design, code, and the arts.**
  - **An explosion of knowledge and profits: who benefits?**
  - **Creativity accelerated beginning in the US economy in the mid-1970s**

# A new world

- **In the past forty years**
  - **Globalization and electronics (Internet, Smartphones) have created a single market with 1 billion middle-class households**
    - **\$1 billion = \$1 x 1 billion households**
  - **Immense wealth achievable very quickly**
  - **Extreme risk and extreme reward**
  - **Tech, design, utility, culture, and entertainment more deeply entwined**

# Intangible investment became 9 % of US economic activity



# JK Rowling and Harry Potter

- **When JK Rowling was first trying to publish Harry Potter**
  - **A reputable London literary agency accepted and pushed her work**
  - **The top 12 London publishers turned her down**
  - **Bloomsbury Press paid £10 thousand to publish it in England**
  - **Scholastic Press paid \$100 thousand (an extraordinary amount) to publish it in the US**

# Harry Potter (cont'd)

- **JK Rowling: billionaire**
  - **\$45 billion in revenue for movies, books, etc.**
  - **Tens of millions of teenagers read a book series with million + words**
- **Payoff to Bloomsbury Press: more than 10,000 to 1**
- **Payoff to Scholastic Publishing: more than 5000 to 1**
- **The 12 editors who turned down Harry Potter lost more money for their firms than they can ever repay**
  - **But almost all of them had to lose out**

# Takeaways on Harry Potter

- **Creativity requires fair play**
  - **Honest gatekeepers (Internet helps!)**
- **Creativity involves large gambles and unequal returns**
- **Creativity is not just technology—culture and entertainment have very big roles**
  - **Steve Jobs was more about design than tech**
- **Artistic originals are important part of hard intangibles**
  - **New US GDP measures will have \$40 billion plus in investment in artistic originals**

# Culture Rising in Economic Importance

- **Cultural enhancement**
  - **Deepen global appreciation of your culture**
    - **Anime: Hayao Miyazaki**
    - **Food: El Bulli**
    - **Pop Music: UK**
    - **Street performance: Montreal (Cirque du Soleil)**
- **Make your country attractive to your diaspora**

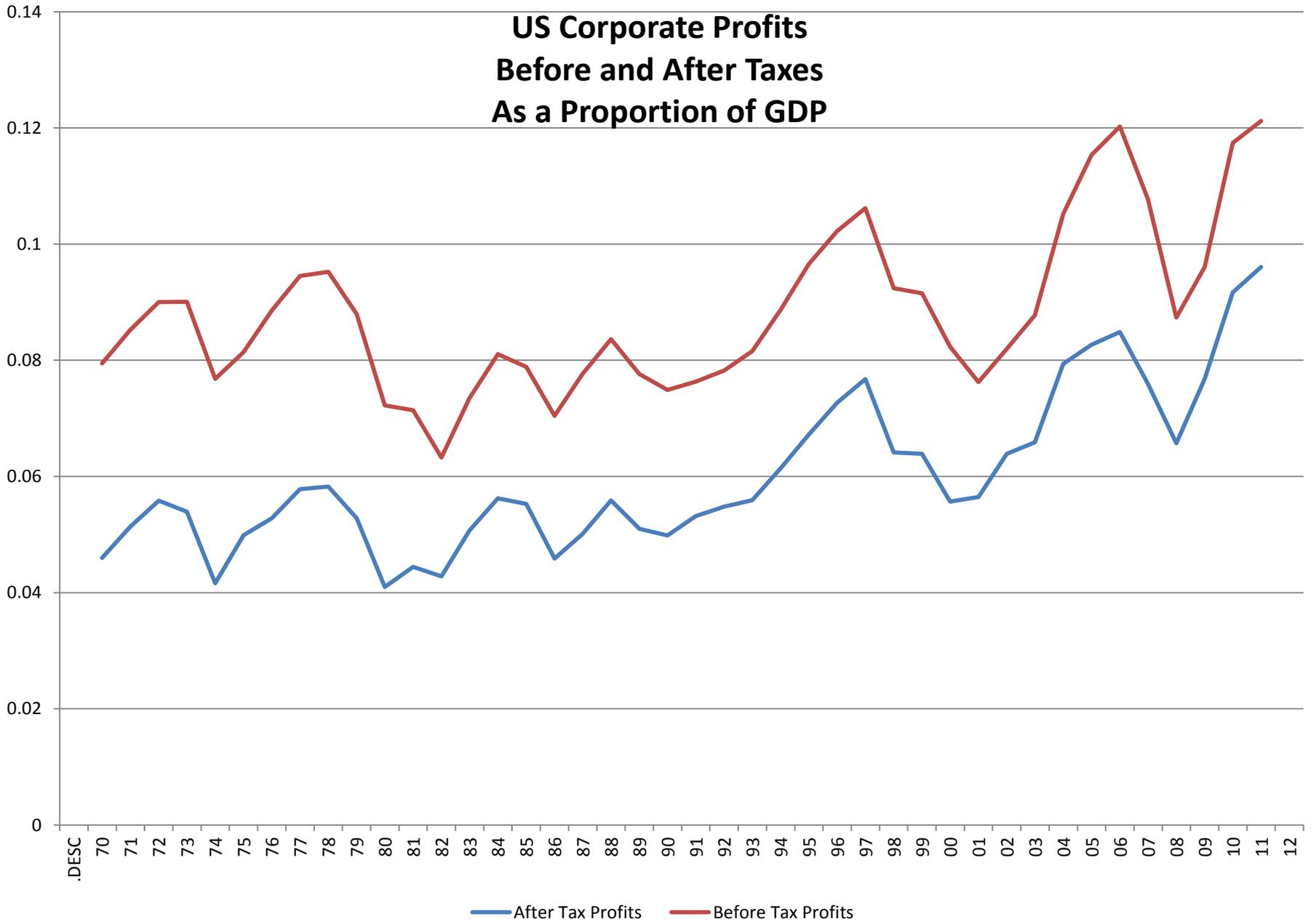
# Amenities

- **Cities are increasingly driven by amenities**
  - **Stimulating, creative, delicious neighborhoods**
  - **High amenity cities are innovative centers**
- **Critics and buzz help the best amenity providers to succeed**
- **Small amounts of government assistance can go a long way**
  - **If it is fair and transparent and supports a discerning audience**

# Profit looms larger within the US economy

- **Even with the great recession affecting economies around the globe, corporate profits are very high**
- **With the rising importance of intangibles, profit (and the equity value) of US corporations has been rising relative to GDP**
  - **After tax profits rose from 5 % to 9 % of total income**
    - **Increase partly due to lower tax rate**
  - **Before tax profits rose from 8 % to 12 % of total income**

# US Corporate Profits Before and After Taxes As a Proportion of GDP



# Winner take all (or most)

- **The competition for creativity results in highly unequal outcomes**
- **Fat tails and skewed distributions**
  - **Top 10 % of best corp patents account for 80-90% of value**
  - **Top 69 classical music composers account for 88 % of classical music recordings**
- **Corporations and individuals: big winners become billionaires quickly**



# Rising economic risk and inequality

- **CEO turnover has doubled**
- **The risk of a given size portfolio of stocks has doubled**
  - **Apple lost \$230 billion in equity value in less than 5 months**
- **Some individuals make a big difference to firm profits**
  - **Pay differences have been magnified**
  - **25 to 40 tech start-ups worth \$1 billion +**
- **Result: Increasing inequality**

# Old economic theory is obsolescent

- **Adam Smith's invisible hand theory says that governance does not matter except to enforce competition and private property**
- **But with innovation, intellectual property rights create state-sanctioned monopoly!**
  - **And speed is crucial to intellectual property**
- **Education, health, and finance are growth industries with rapid innovation**
  - **But these expenses drag on profits and national tax systems**



# Is it still Karl Marx vs. Adam Smith?

- **Is the great question of our age still:**
  - **who owns the means of production?**
- **The conflict between socialism and capitalism that dominated the twentieth century**
  - **Is it still central to our policy issues?**
  - **The left-right spectrum increasingly makes political debate more difficult**

# Information and its discontents

- **Is information available to consumers to make good choices?**
- **Transparency, accountability, sustainability**
  - **Are increasingly important to consumers, nations, corporations**
- **Two extremely difficult to answer questions:**
  - **Do we need everyone to work so fast?**
  - **How do we know the right amount of investment in innovation?**



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**Thank you!**