

The Joint Determination of TFP and Financial Sector Size

Christian Bauer (LMU Munich)

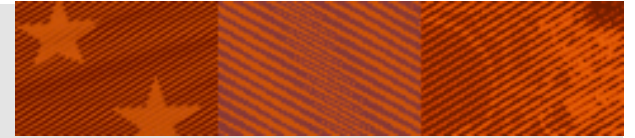
Sevi Mora (Univ. of Edinburgh)

Discussed by:

Jim Costain (Banco de España)

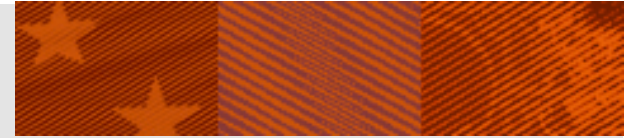
October 18, 2012

The size of the finance sector



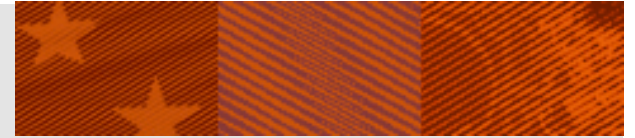
- **Issues:** What determines the **size of the financial sector**, how does it affect **productivity and growth**, and is it **optimal**?

The size of the finance sector



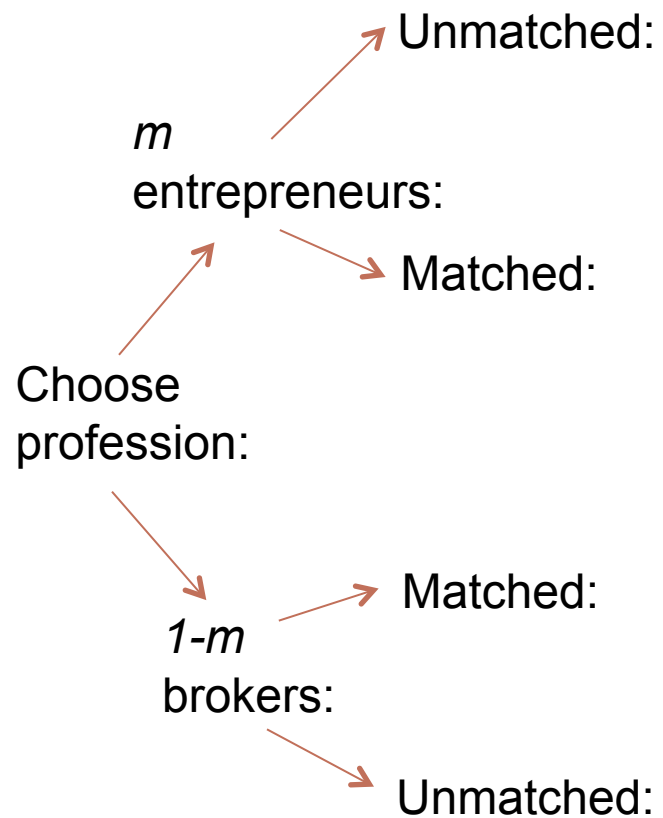
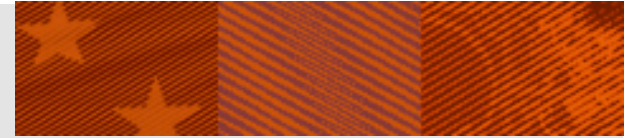
- **Issues:** What determines the **size of the financial sector**, how does it affect **productivity and growth**, and is it **optimal**?
- **Important, difficult, topical** questions
- **Simple, elegant** general equilibrium search model of credit markets

The size of the finance sector

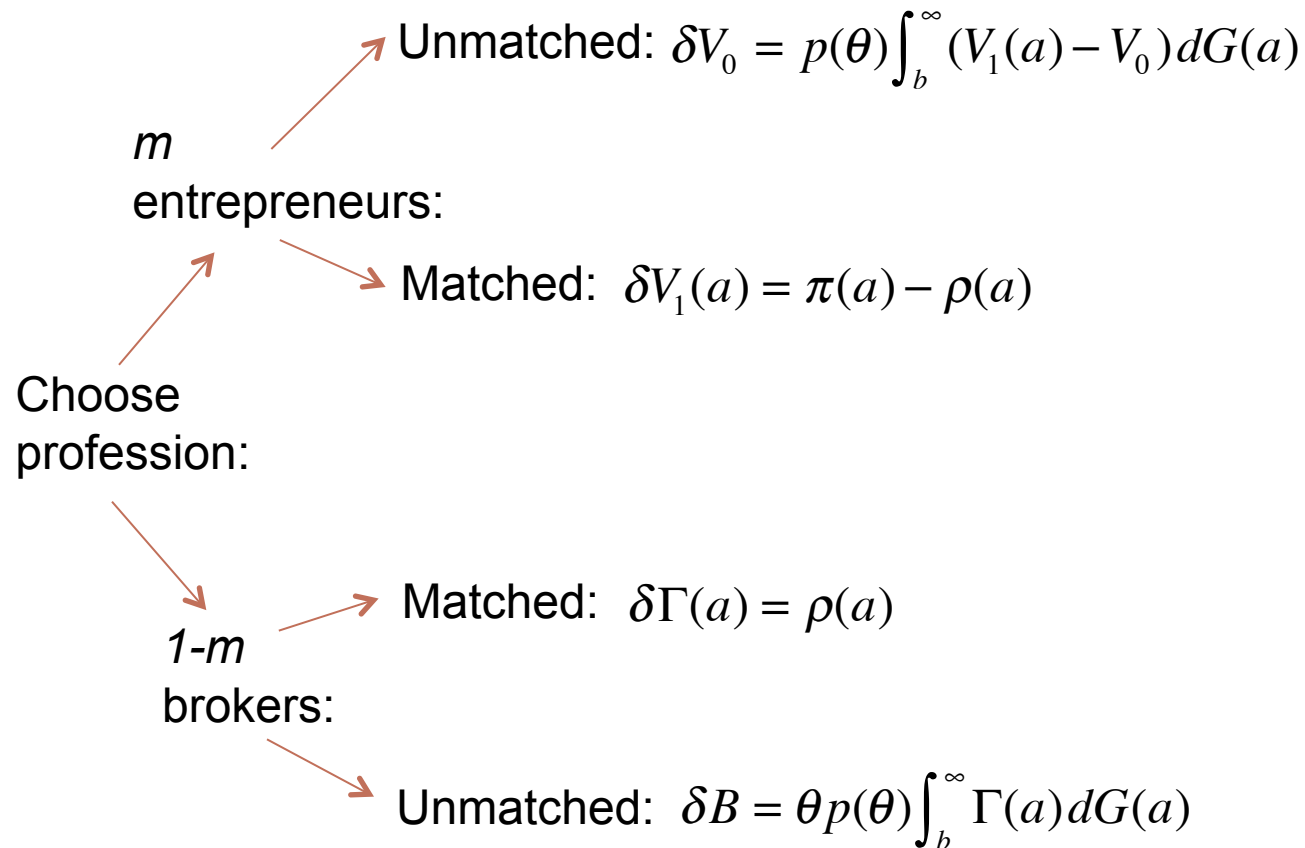
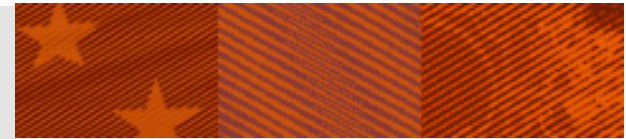


- **Issues:** What determines the **size of the financial sector**, how does it affect **productivity and growth**, and is it **optimal**?
- **Important, difficult, topical** questions
- **Simple, elegant** general equilibrium search model of credit markets
- **Main criticisms:**
 - Quite **preliminary**
 - Missing some relevant references
 - **Relevance of main positive results?**
 - **Would like to see more normative results**

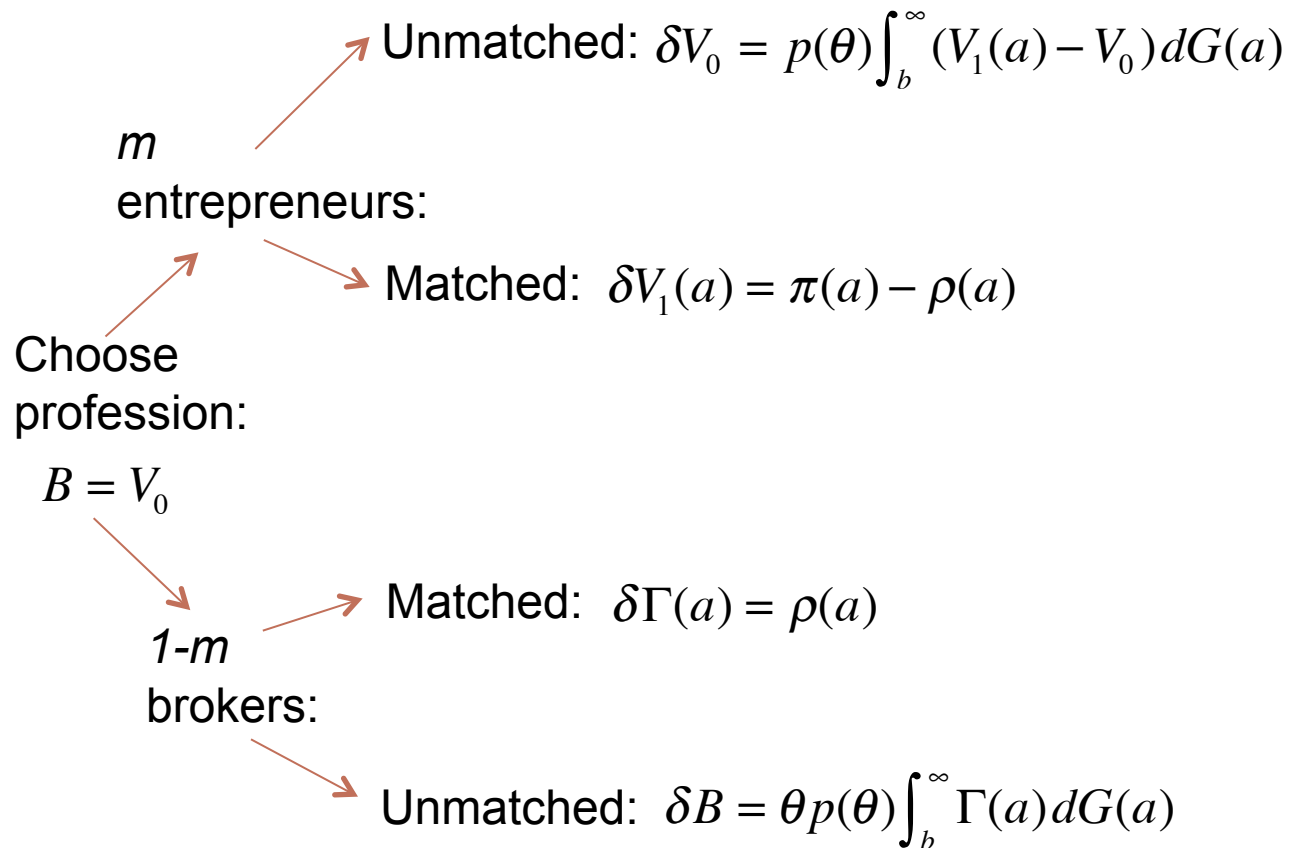
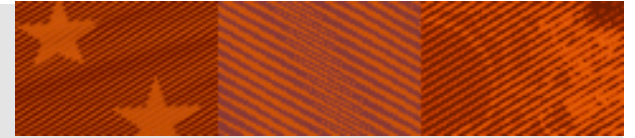
Make things, or finance things



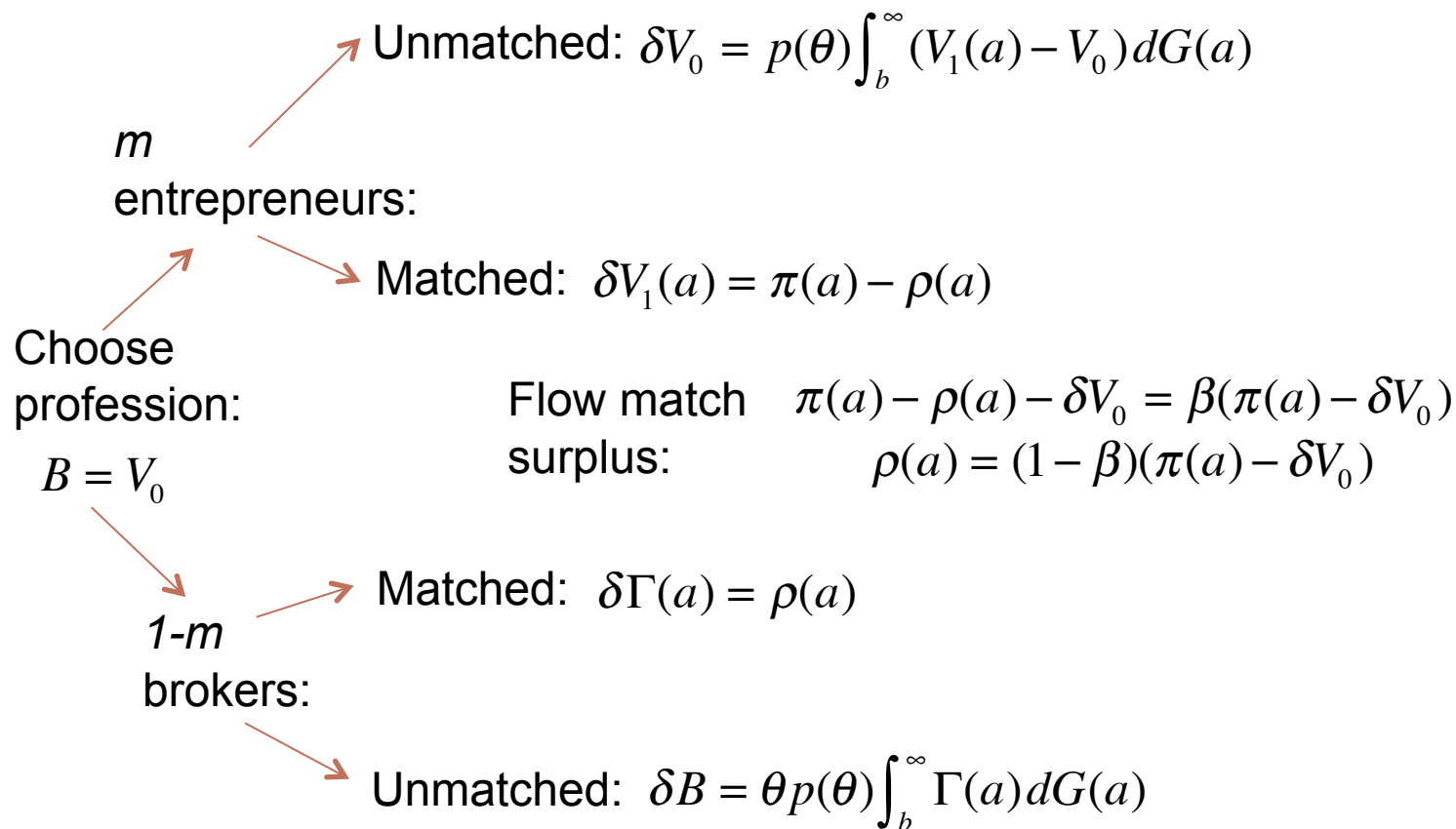
Value functions



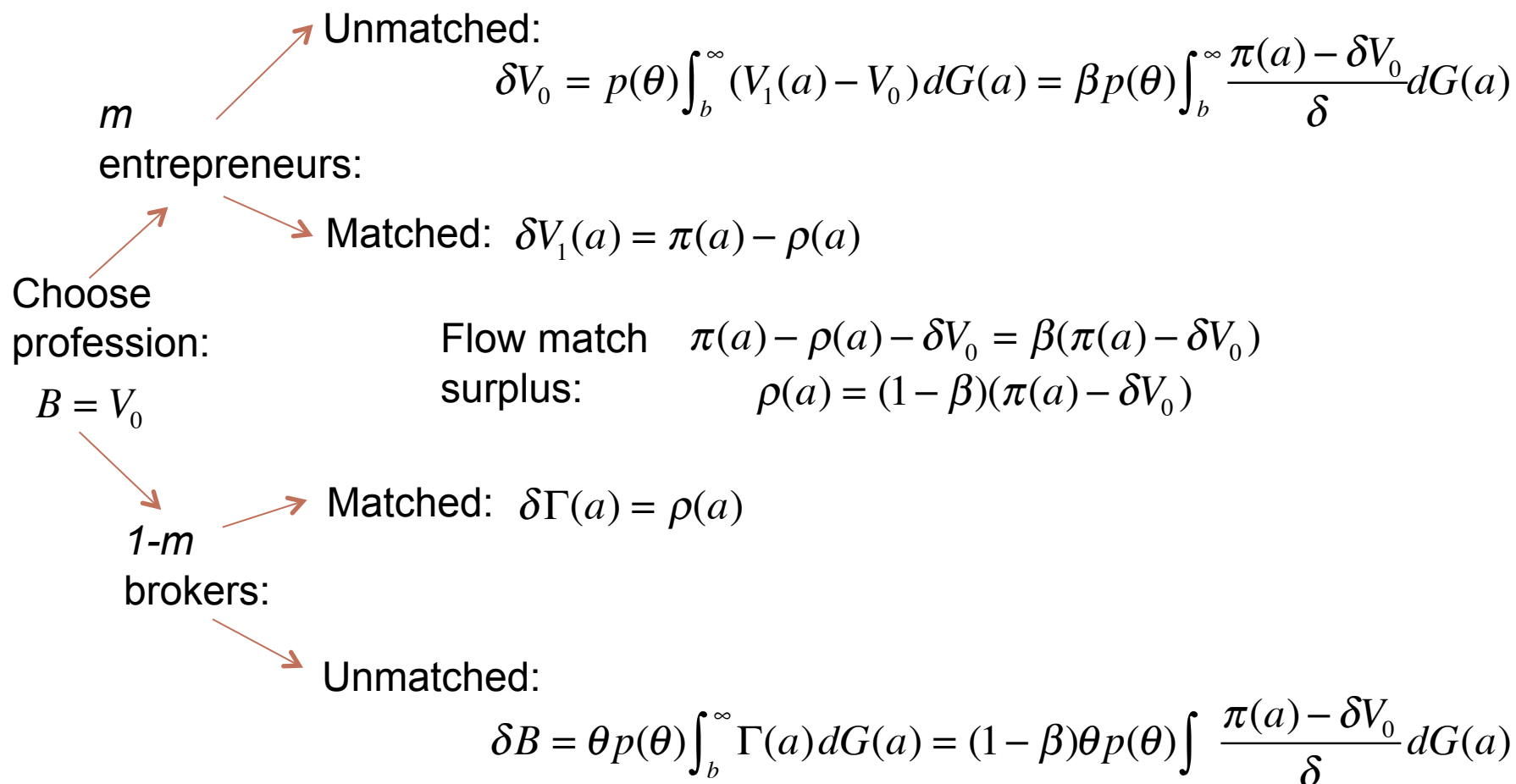
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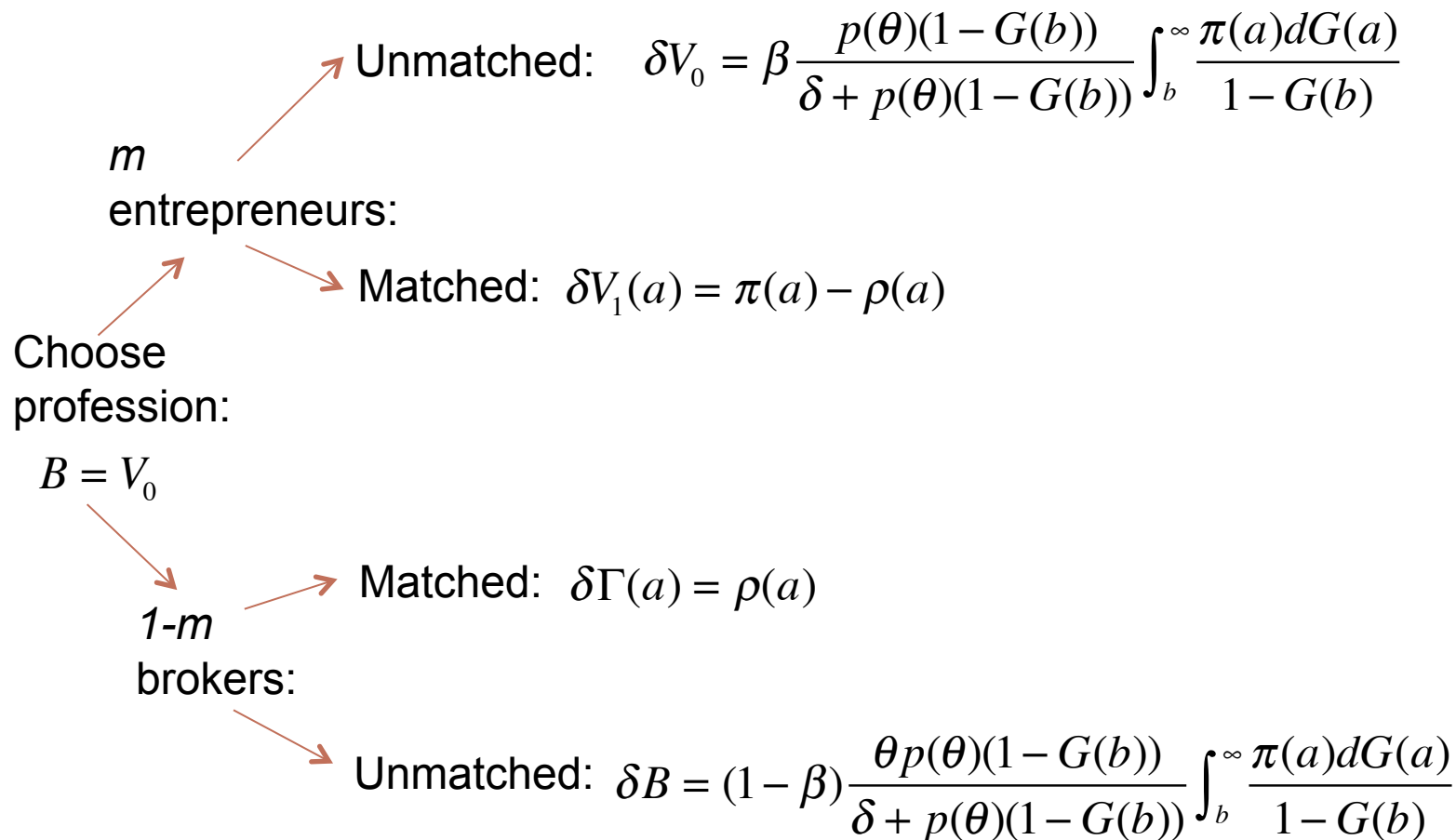
Bargaining



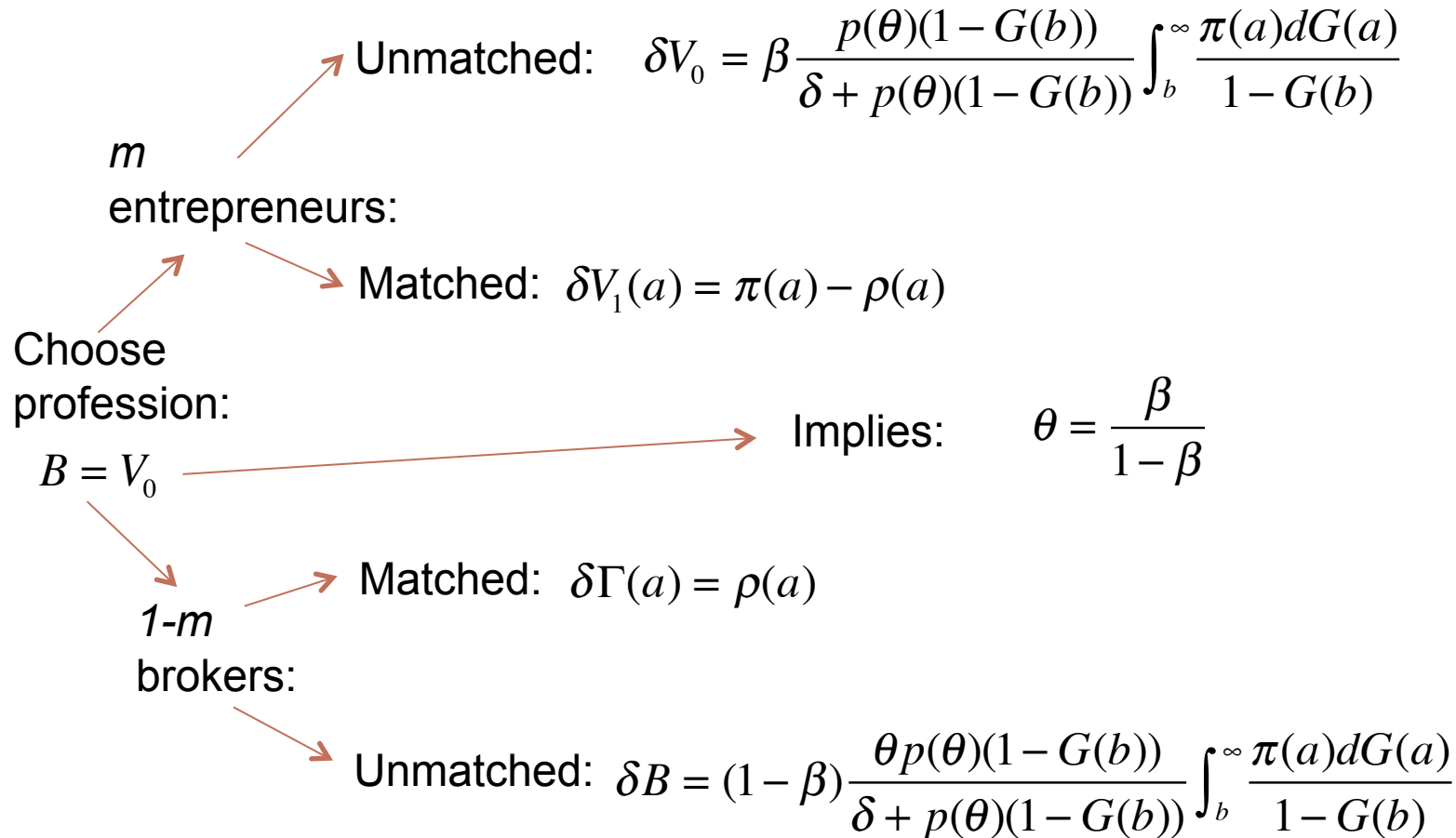
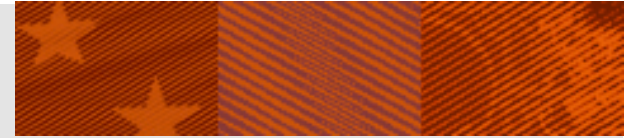
Plug in bargaining shares



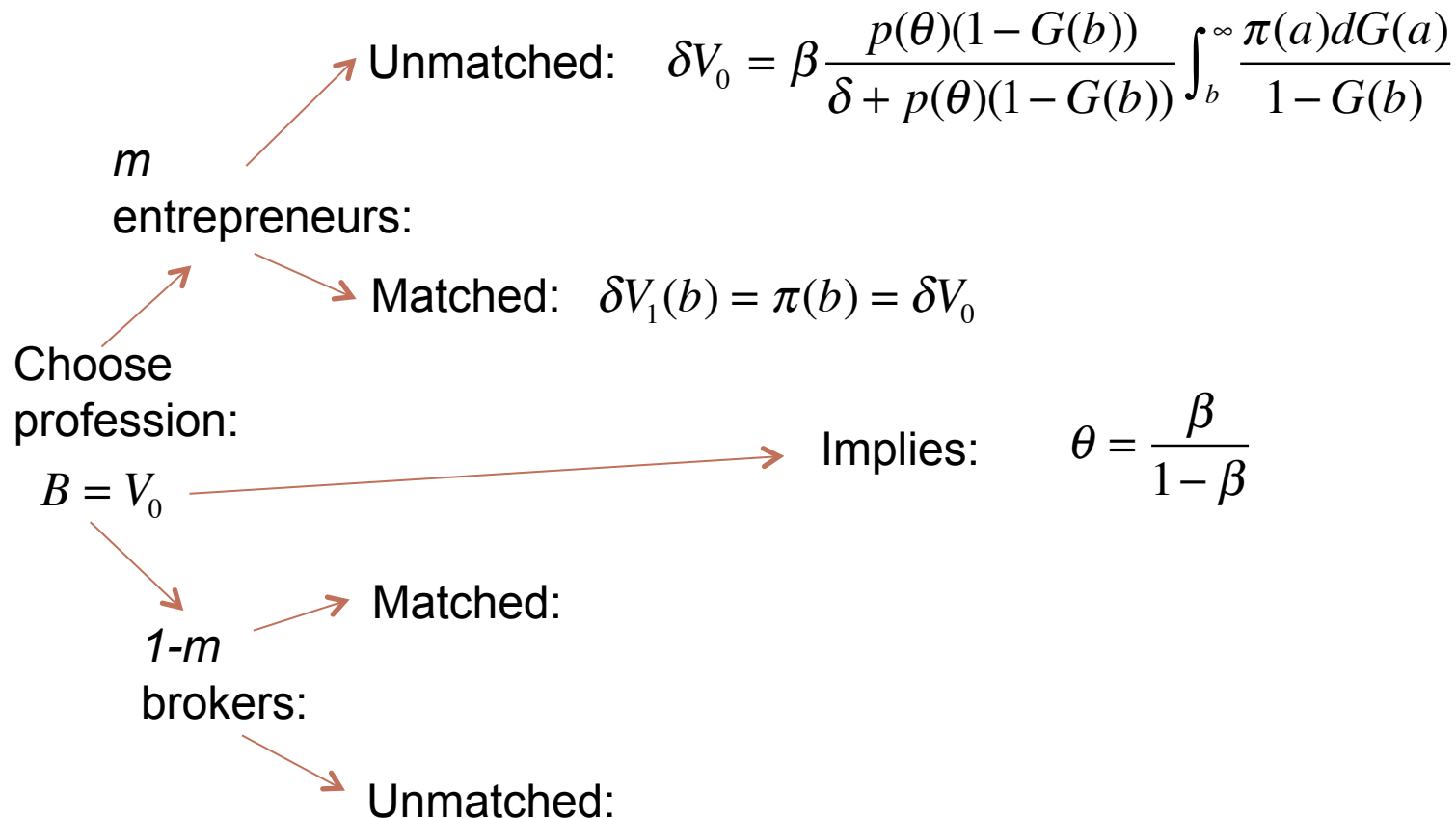
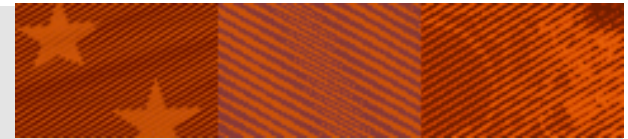
Solve for V_0 and B



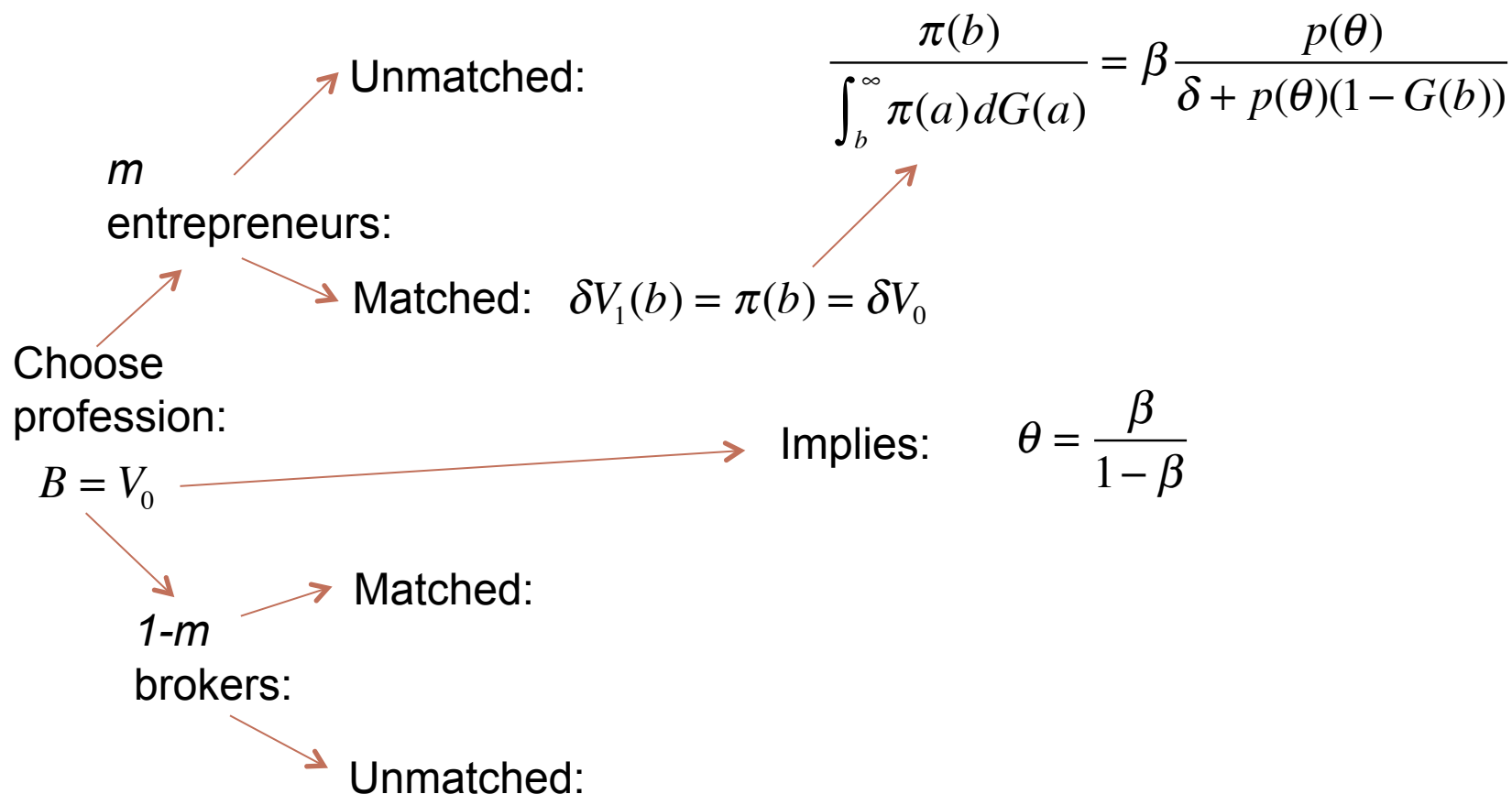
Arbitrage determines tightness



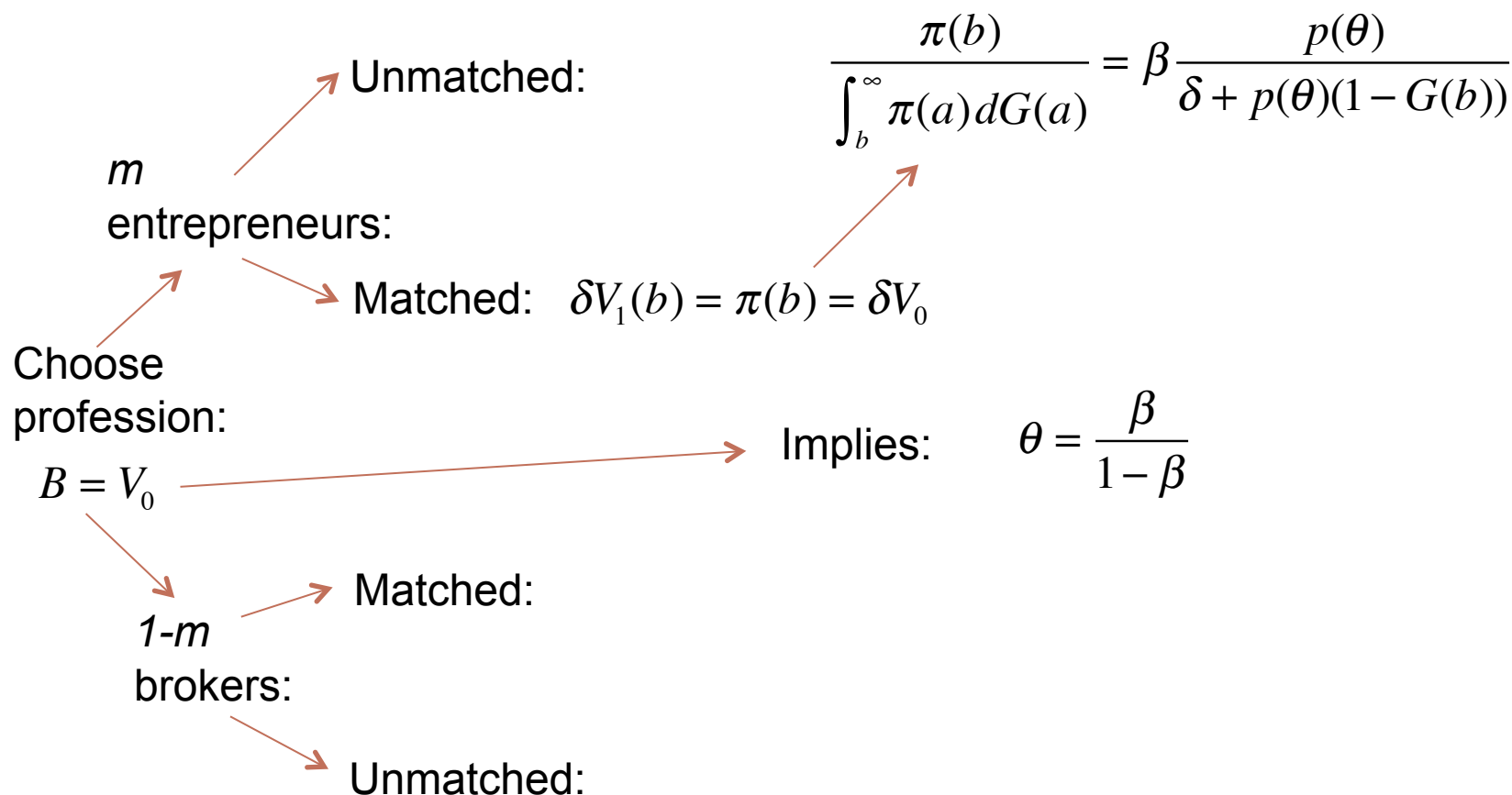
Indifference at reservation threshold:



Calculating reservation threshold:

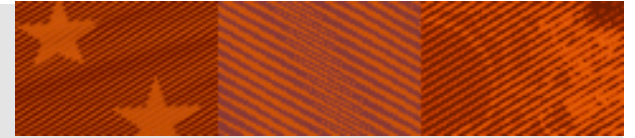


Calculating size of financial sector:



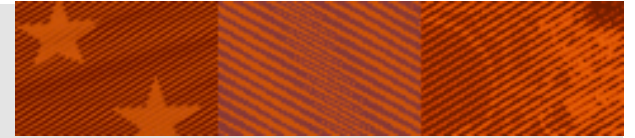
Tightness: $\theta = \frac{m_s}{1 - m} = \frac{\delta}{\delta + p(\theta)(1 - G(b))} \frac{m}{1 - m}$

Minor comments



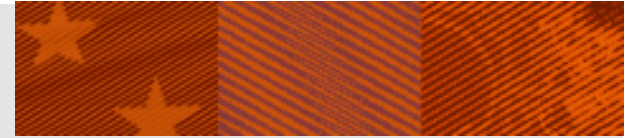
- Clarify discussion of **role of annuities markets**
- Discuss assumption of **match-specific productivity**
- Present all **four Bellman equations symmetrically**, as I did here
 - Discuss assumption that **brokerage activity has no opportunity cost**
- **Reorder to tighten up the derivations**, as I did here
 - Bellman + bargaining equations $\rightarrow$ (18)
 - Equilibrium tightness (13) derived on the way to (18)
 - **No need to pass through (5), (8), (9)!**
- Correct **contradictory comments** about Result 3

Correlation of wealth with finance sector size



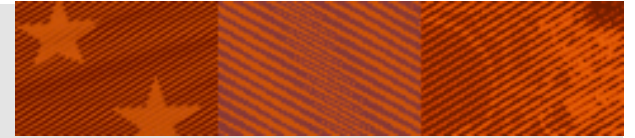
- Empirically, **wealthier** countries have **larger financial sectors**
- Obviously, **more intermediation, cet. par.**, helps produce **more output**
 - But in **general equilibrium**, finance sector could **crowd out** production sector

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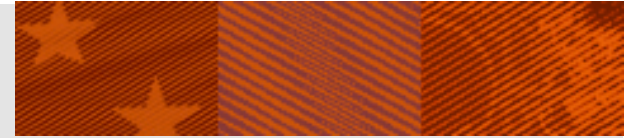
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- **Greater wealth, per se, does not lead to a larger financial sector**
 - Because **returns to production** and **returns to finance** are **both proportional** to productivity
- Model suggests alternative explanation of correlation: **more efficient production** creates **demand for more financial intermediation**

Correlation of wealth with finance sector size



- **Greater wealth, per se, does not lead to a larger financial sector**
 - Because **returns to production** and **returns to finance** are **both proportional to productivity**
- Model suggests alternative explanation of correlation: **more efficient production** creates **demand for more financial intermediation**
- But intuitively some **other characteristics of advanced economies** may be **more plausible drivers** of demand for intermediation?
 - **More complex production** might drive demand for more financial intermediation
 - **More specialization** might drive demand for more financial intermediation
- **Suggestion:**
 - Work out a version of your growth model where **number of products is trending over time**

Is finance bloated?



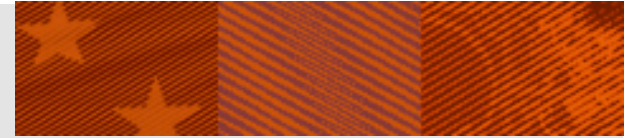
- Size of the financial sector is a **hot topic nowadays**, but the interest is **normative as well as positive**
- In the model **financial sector may be too big or too small**
 - Depends especially on **bargaining shares**
- But paper contains **very few normative results...**

Some missing references



- **Philippon and Reshef (20XX)**, “Wages and human capital in US finance...”
 - “...finance jobs were relatively more **skill intensive, complex, and highly paid prior to the 1930s and after the 1980s**, but not in the interim”
 - ...circumstantial evidence that size of financial sector is policy-determined
 - ...but **not** just a matter of changing bargaining shares
- **Bolton, Santos, and Scheinkman (2012)**, “Cream skimming...”
 - Adverse selection: **opaque OTC market** may take away the most profitable clients from transparent exchanges, resulting in excessively large, excessively paid OTC sector

Is finance bloated?



- Size of the financial sector is a **hot topic nowadays**, but the interest is **normative as well as positive**
- In the model **financial sector may be too big or too small**
 - Depends especially on **bargaining shares**
- But paper contains **very few normative results...**
- Can your model do more? Can it shed light on **claims that financial sector has crowded out talent from productive activities?**



James Costain

Thanks!

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