Paper Reading Notes

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1 Trade

- 1.1 Akcigit et al. (2018a)
- 1.2 Fernandes et al. (2023)
- 1.3 Martin et al. (2023)

1.4 Demidova and Rodríguez-Clare (2009)

- Welfare: productivity, terms of trade, variety, curvature (heteorogenity across varieties)
- consumption subsidy, export tax, import tariff allows small economy to deal with two distortions and reach first-best allocation
- export subsidy generates increase in productivity, but negative on other three, decrease welfare
- import tariff improves small economy's welfare

1.5 Demidova (2017)

- Monopolistic competition with heterogenous firms, endogenous wages, non-separable, non-homothetic quadratic preferences generating variable markups
- optimal level of the revenue generating import tariff is strictly positive
- reductions in cost-shifting trade barriers are welfare-improving
- in both cases, variable markups result in negative pro-competitive effects, reducing gains from trade

1.6 Costinot et al. (2020)

- Large firms tend to export
- country maximizing domestic welfare, self-selection of heterogenous firms into exports calls for import subsidies on the least profitable foreign firms
- there is no rationale for export subsidies or taxes on the least profitable domestic firms

1.7 Atkeson and Burstein (2008)

2 Industrial Policy

2.1 Juhász et al. (2023)

2.2 Mazzucato and Rodrik (2023)

- Table of Taxonomy of conditionalities in the case studies
 - Type of firm behavior targeted: access, directionality, profit sharing, reinvestment
 - Fixed versus negotiable/ iterative conditions
 - Risks/ rewards sharing mechanism
 - Measurable performance criteria and monitoring and evaluation
- Embeddedness, autonomy and the development state matrix

2.3 Rodrik (2018)

2.4 Aiginger and Rodrik (2020)

• Chronique of industrial policy definition since 1981

2.5 McMillan et al. (2017)

- Two theories explaining growth: 1) dual-economy. draws distinction between agriculture as traditional and industry as modern sectors of economy. Different economic logics are at work within so cannot be lumped together. Accumulation innovation and productivity growth take place in the modern sector, the traditional sector remains technologically backward and stagnant. Labor and other resources migration rate to modern sector decides growth rate. Lewis 1954, Ranis and Fei 1961.
 - 2) **neoclassical growth model**. presumes different economic activity are structurally similar enough to aggregate into a representative sector. growth depends on the incentives to save, accumulate physical and human capital, and innovate by developing new products and processes. Solow 1956, Grossman and Helpman 1991, Aghion and Howitt 1992.
- two challenge: structural transformation and fundamentals. Former, ensure resources flow rapidly to high productivity. Latter, on broad and long-run growth two driving forces: quality of institutions(governance, law, biz environment) or the level of human capital(education, skills, training). Acemoglu Johnson Robinson 2001, Glaeser et al 2004.

• Results

- Brazil and Botswana: structural change important in launching into middle-income but tiny role thereafter
- Vietnam and Ghana: structural change significant contribution
- India, Nigeria Zambia: structural change different way. less rapid decline in the employment share of low-productivity agriculture, exacerbated by the lack of laborintensive manufacturing for export.
- \bullet Typology of growth patterns: structural transformation \times Investment in fundamentals
- total labor productivity: $P_t = \sum_{i=1}^n \theta_{i,t} P_{i,t}$.

Change in total labor productivity $\Delta P_t = \sum_{i=1}^n \theta_{i,t-k} \Delta P_{i,t} + \sum_{i=1}^n \Delta P_{i,t-k} + \sum_{i=1}^n \Delta \theta_{i,t} \Delta P_{i,t}$

4

• productivity change as sum of with-in sector change and structural change

$$\Delta P_t = \sum_{i=1}^n \theta_{i,t-k} \Delta P_{i,t} + \sum_{i=1}^n P_{i,t} \Delta \theta_{i,t}$$

3 Innovation

3.1 Aghion et al. (2001)

3.2 Prato (2022)

• Meeting rate

- 3.3 Bai et al. (2023)
- 3.4 Adão et al. (2020)
- 3.5 Liu and Ma (2021)
- 3.6 Kogan et al. (2017)
 - Technological innovation accounts for significant medium-run fluctuations in aggregate economic growth adn TFP.
 - patent-level estimates of private economic value are positively related to the scientific value of these patents
 - Extended data: https://github.com/KPSS2017/Technological-Innovation-Resource-Allocation-and-G

3.7 Aghion et al. (2005)

- Competition discourages laggard firms from innovating and encourages neck-and-neck firms. This generates and inverted-U, together with competition on equilibrium industry structure
- average tech distance btw leaders and followers increases with competition
- the inverted-U is steeper when industries are more neck-and-neck

3.8 König et al. (2016)

- Firms endogenously choose between in-house R&D and imitation other firm's tech subject to limits of absorptive capacities to improve productivity based on profit maximization motive
- closer to technological frontier face fewer imitation opportunities, more in-house
- BGE features persistent productivity differences even when starting from identical firms

4 Search and Unemployment

- 4.1 Mortensen and Pissarides (1994)
- 4.2 Shimer (2005)
- 4.3 Hornstein et al. (2011)
- 4.4 Lenoir et al. (2022)
 - Search friction of new customers distort the allocation activities across heterogeneous producers in a Ricardian model of trade.
 - Markets with high estimated frictions display less dispersion in sales btw high and low productivity firms
 - Increase in the level of search frictions pushes out the least productive exporters while increases export sales at the top of the productivity distribution

- 5 Heterogenous Agents
- 5.1 Aiyagari (1994)
- 5.2 Krusell and Anthony A. Smith (1998)
- 6 Firm Dynamics
- 6.1 Hopenhayn (1992)
- 6.2 Kochen (2023)
- 6.3 Arellano et al. (2012)
- 6.4 Cooley and Quadrini (2001)
 - Introducing financial-market frictions in a basic model of industry dynamics with persistent shocks
 - the combination of persistent shocks and financial frictions can account for the simultaneous dependence of firm dynamics on size (once we control for age) and on age (once we control for size).

6.5 Jovanovic (1982)

- This is the seminal paper to incorporate uncertainty and learning into entrepreneurship and firm dynamics.
- 6.6 Klette and Kortum (2004)
- 6.7 Melitz (2003)
- 7 Uncertainty
- 7.1 Arellano et al. (2019)
- 8 Empirical
- 8.1 Diao et al. (2021)
 - The poor employment performance of large firms is related to use of capital-intensive techniques associated with global trends in technology.
 - larger firms that exhibit superior productivity performance do not expand employment much
 - small firms that absorb employment do not experience any productivity growth.
 - Relatively large firms in the manufacturing sectors of Tanzania and Ethiopia are significantly more capital-intensive than what would be expected on the basis of the countries income levels or relative factor endowments
 - Reasons: 1, advanced economies develop labour saving technology; 2, globalization and the spread of global value chains has had a homogenizing effect on technology adoption,

and the imperative of competing with production in richer countries at similar quality level makes it difficult to undertake large shifts in techniques

• New panels of manufacturing firms: Tanzania $2008\sim 16$, Ethiopia $1996\sim 2017$

8.2 Laplane and Mazzucato (2020)

- Policies that explicitly take into consideration the risk-taking entrepreneurial role of the state, can positively affect reward distributions and favor more equitable public private partnerships.
- Sharing rewards enables a more portfolio mindset, where the upside is used to cover the downside, and more stable funding to serve citizens' needs. It also signals the value and legitimacy of the state's role.
- Table of existing policy instruments for financing innovation that allow for profit-Sharing
- Table of the legal underpinning of the distribution of rewards in public private partnerships parasitic versus symbiotic ecosystems

8.3 Rodrik (2016)

- Developing countries only converge to rich country income levels conditional on country-specific disadvantages like institutions or poor geography being overcome.
- Matrix of structural change and investment in fundamentals
- much of recent performance in Africa due to advantageous external context and making up of lost ground
- structural change and industrialization operating at less than full power
- should there be a miracle, it should be agriculture or service led than traditional ones.

8.4 Aghion et al. (2018)

- inventor collect 8% of total private return
- entrepreneurs get over 44%
- \bullet blue-collar get 26%
- the rest goes to white-collar workers
- entrepreneurs have negative returns prior to patent application but subsequently become highly positive
- Finland data

8.5 Akcigit et al. (2018b)

- Higher taxes negatively impact the quantity and the location of innovation, but not average innovation quality.
- state-level elasticities to taxes are large and consistent with the aggregation of the individual level responses of innovation produced and cross-state mobility
- corporate taxes have special effect on corporate inventor's innovation production and mobility
- personal income tax affects quantity of innovation and mobility of inventors.

- $\bullet\,$ panel of patent inventors since 1920
- $\bullet\,$ historical state-level corporate tax database with corp tax rates and tax base information
- \bullet existing: state-level personal income taxes

9 Data

9.1 Macro

• Groningen Growth and Development Centre: indicators of growth and development https://www.rug.nl/ggdc/

9.2 Medical

- Medical Expenditure Panel Survey https://meps.ahrq.gov/mepsweb/
- FDA Orange book https://www.fda.gov/drugs/drug-approvals-and-databases/approved-drug-product

9.3 Trade

- GlobalTradeAlert https://www.globaltradealert.org/
- Cboe Trade Alerts https://www.cboe.com/services/analytics/tradealert/institutions/

9.4 Legal

- LobbyView https://www.lobbyview.org/
- QuantGov https://www.quantgov.org/

9.5 Innovation

- Orgin IP Solutions https://origin.com/
- PATENTS-ICRIOS DATABASE https://icrios.unibocconi.eu/resources/databases/patents-icrios-database

9.6 Firm

- FactSet Supply Chain Relationships https://wrds-www.wharton.upenn.edu/pages/about/data-vendors/factset/
- Cortellis https://access.clarivate.com/login?app=cortellis
- Westlaw Edge https://legal.thomsonreuters.com/en/products/westlaw-edge
- $\bullet \ \mathrm{MIDAS} \ https://www.iqvia.com/solutions/commercialization/brand-strategy-and-management/market-measurement/midas$
- Namsor https://namsor.app/
- GGDC 10 Sector database
- ullet expanded africa sector database
- UNIDO's Indstat2

9.7 Transport

• TUD19: multi-city traffic dataset https://utd19.ethz.ch/; https://github.com/ambuehll/UTD19

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