

# Development and Industrialization in Iran: Some Observations

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# Late industrialization

- How to catch up when early industrializers are moving forward at a fast pace?
- Through free trade? That would be really easy, right?
- Where do you get the money to build infrastructure to attract investment?
- Exporting agricultural products? It looks like advanced industrialized countries are better at producing food –other than some cash crops.
- Exporting natural resources – what about the effects of deterioration of terms of trade?
- How about oil producers with a lot of oil rent? What about oil shocks?
- Investing in human capital, physical capital, technological and learning? What type?

# Industrial policy

- Infant industry argument
- Sectoral targeting
- Trade orientation
- Technological learning and capability building
- Exposure to international flows

# The Making of Iran's Investment-Oriented Industrialization Framework

# Investment Approach

- came into existence with the increasing oil revenues after 1953
- main assumption physical capital formation is the main engine of growth
- centered on the goal of increasing investment in the industrial sector, beginning from the production of simple products and moving to more sophisticated capital and intermediate goods
- to pay for imports of necessary capital goods, the state resorts to facilitating the export of primary resources, borrowing, and/or attracting foreign direct investment
- since these financial resources for imports of intermediate and capital goods are limited, foreign exchange gaps may arise especially during negative oil shocks

- additional foreign exchange is saved by deepening the industrial base
- the industrialization process necessitates more exports in order to permit new investments
- the problem is addressed by encouraging exports of more primary resources, more traditional goods, or some manufactured products by providing subsidies to some domestic firms.
- while some capabilities in production, management, and marketing are developed (but not to the level of those in advanced countries), this process can continue to the extent that the investment flows remain available – which are contingent upon oil revenues

This worked relatively well prior to the Revolution due to:

- government's strong will for economic and industrial development
- little international political tensions
- ample foreign currency and no gap between official and free market exchange rates
- limited price controls on manufactured products
- direct investment by the government in the manufacturing sector
- access to foreign investment and credit

YET

- government's attempt to check inflationary pressure by facilitating imports and strengthening the domestic currency probably helped to unfold revolutionary

After the Revolution:

The post-revolutionary government inherited the oil-based, investment-oriented development policy framework

Policy changes made after the revolution accentuated some of the negative aspects of the previous framework

Due to political-institutional reasons, development strategies formulated after the Revolution have performed even worse.

Important:

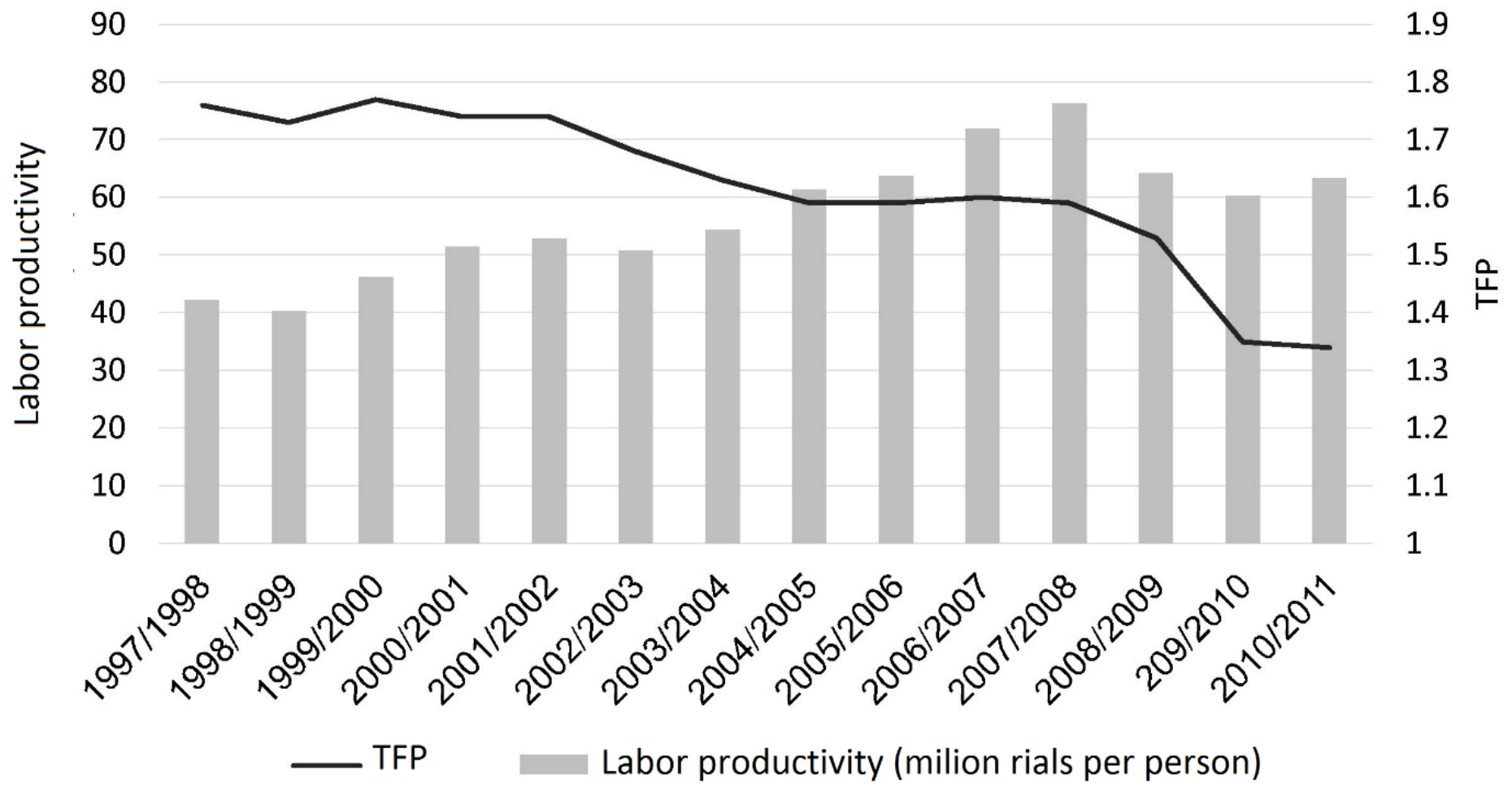
Social justice agenda of the revolution versus the actual base of the revolutionary cadre in the traditional right

Reflected in the Constitution

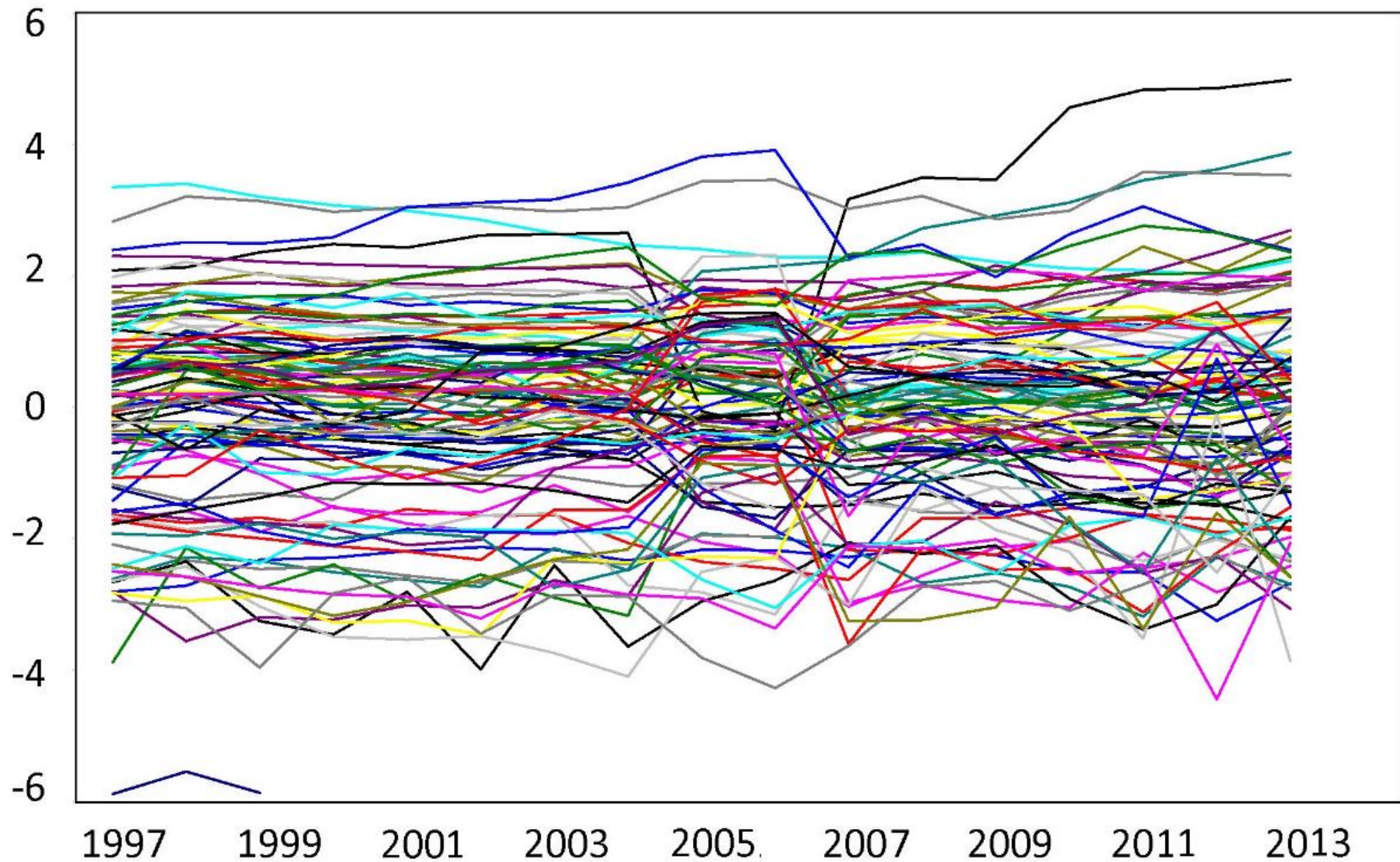


# Manufacturing Sector Development and Exports

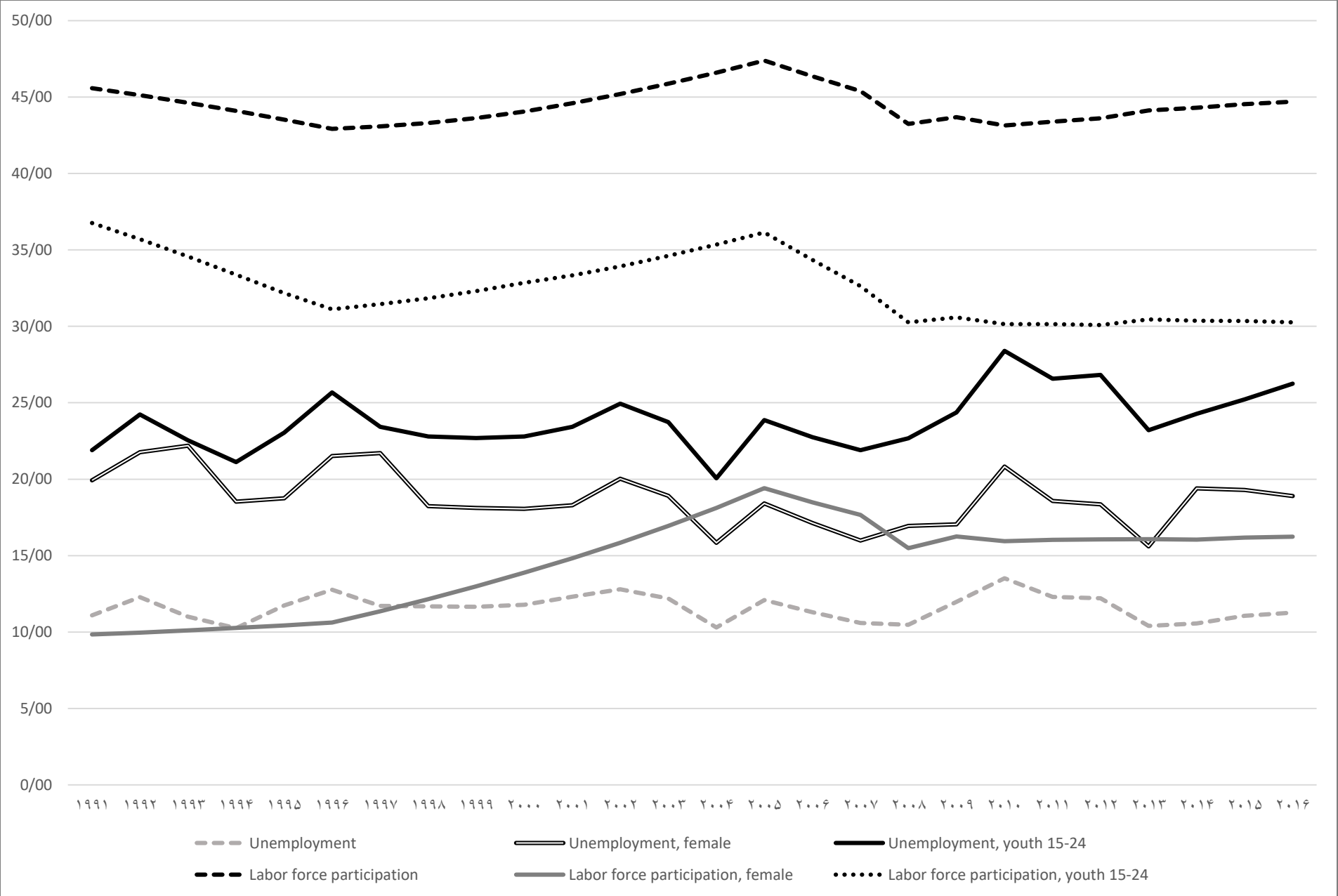
- share of manufacturing value added in GDP is low
- while inward-oriented, the manufacturing plants are highly dependent on imports of intermediate and capital goods
- manufacturing activities of the Third Industrial Revolution type are absent or negligible
- Increasing exports in recent years is mainly due to energy (resource based and subsidized)



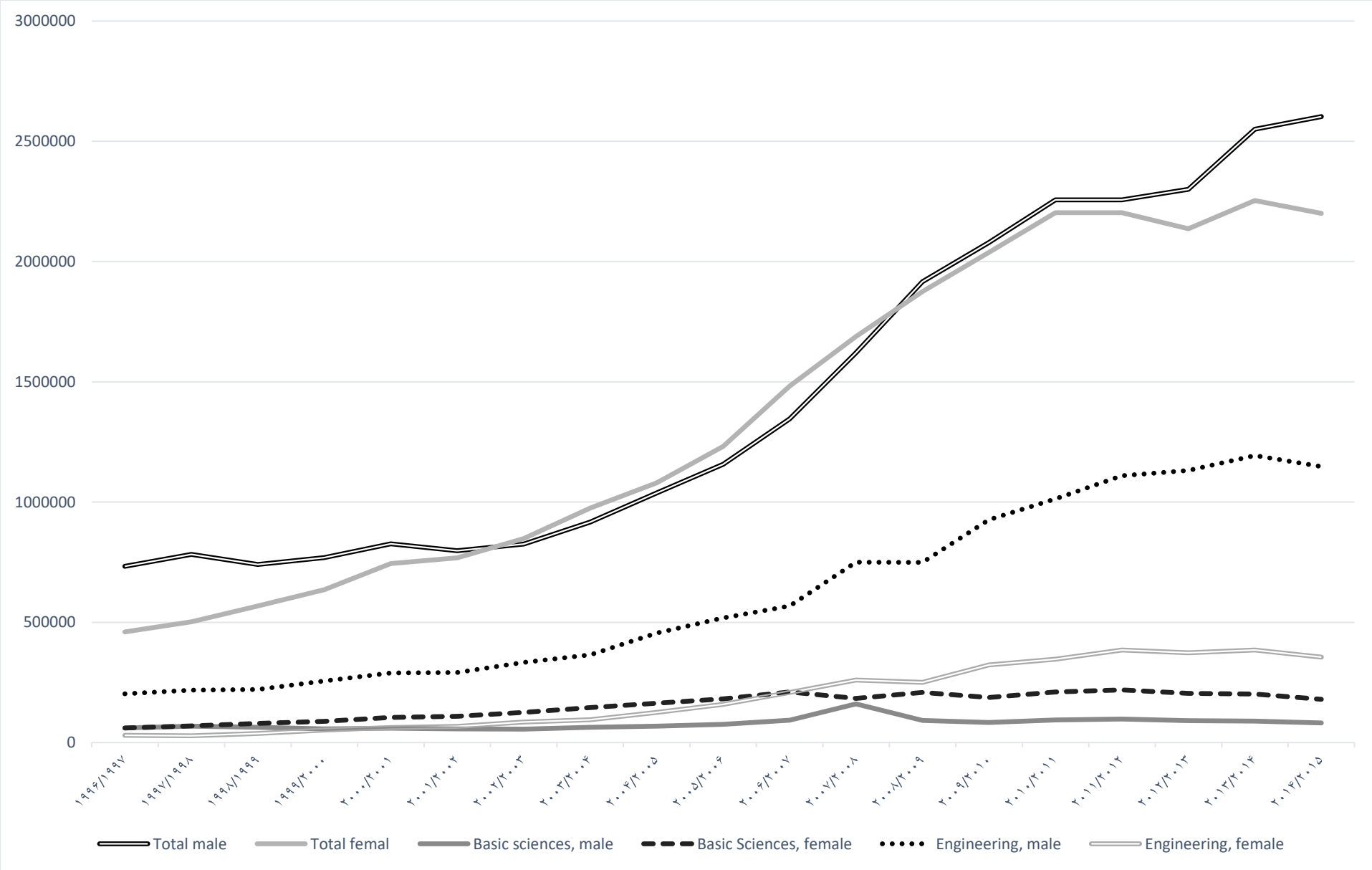
Labor Productivity in Million Rials (value added per worker—constant prices for Iranian fiscal year 1997/1998) and Total Factor Productivity [Source: Base on SCI (2016), Time series data]



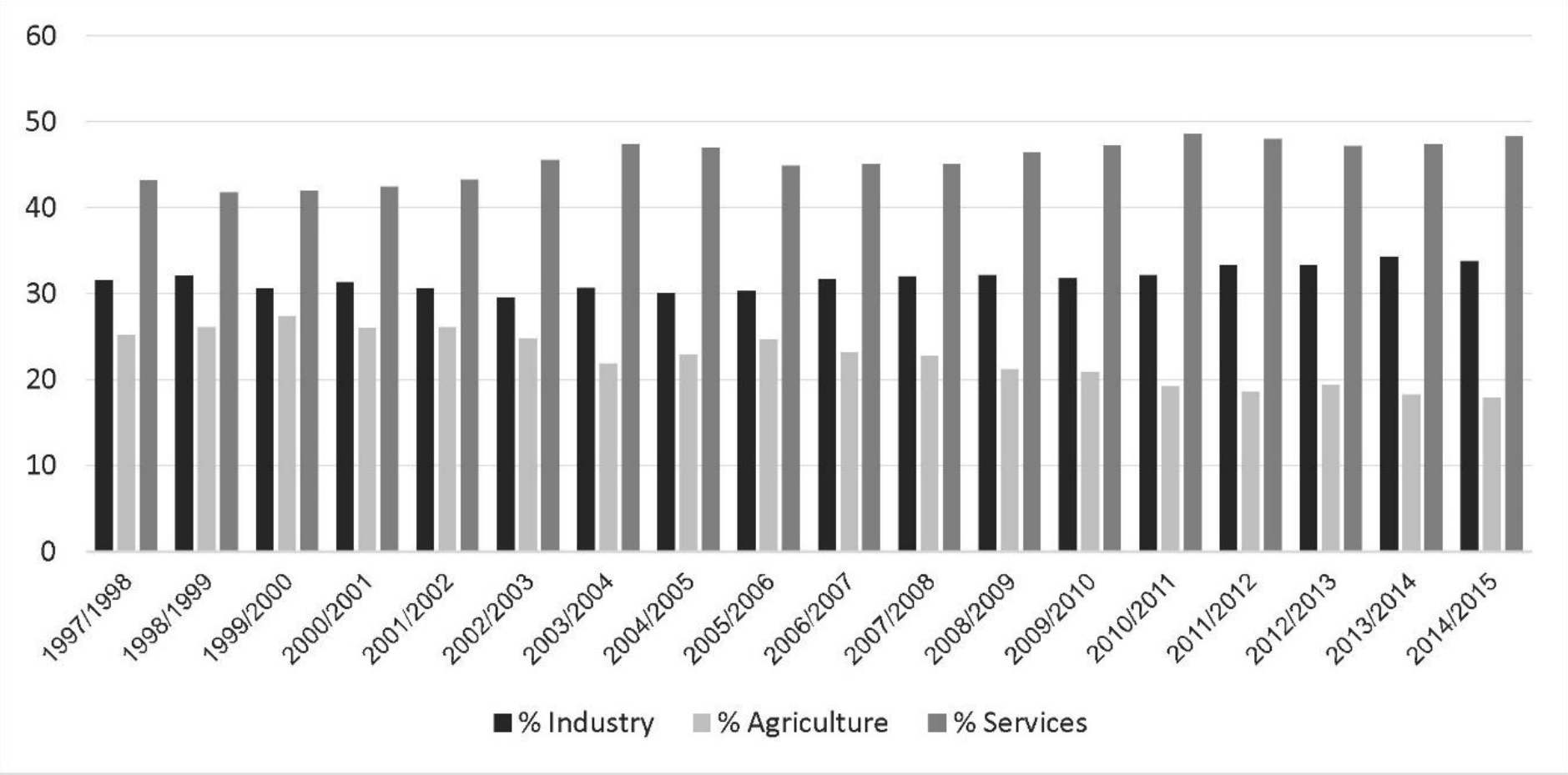
TFP Changes for 101 Manufacturing Subsectors



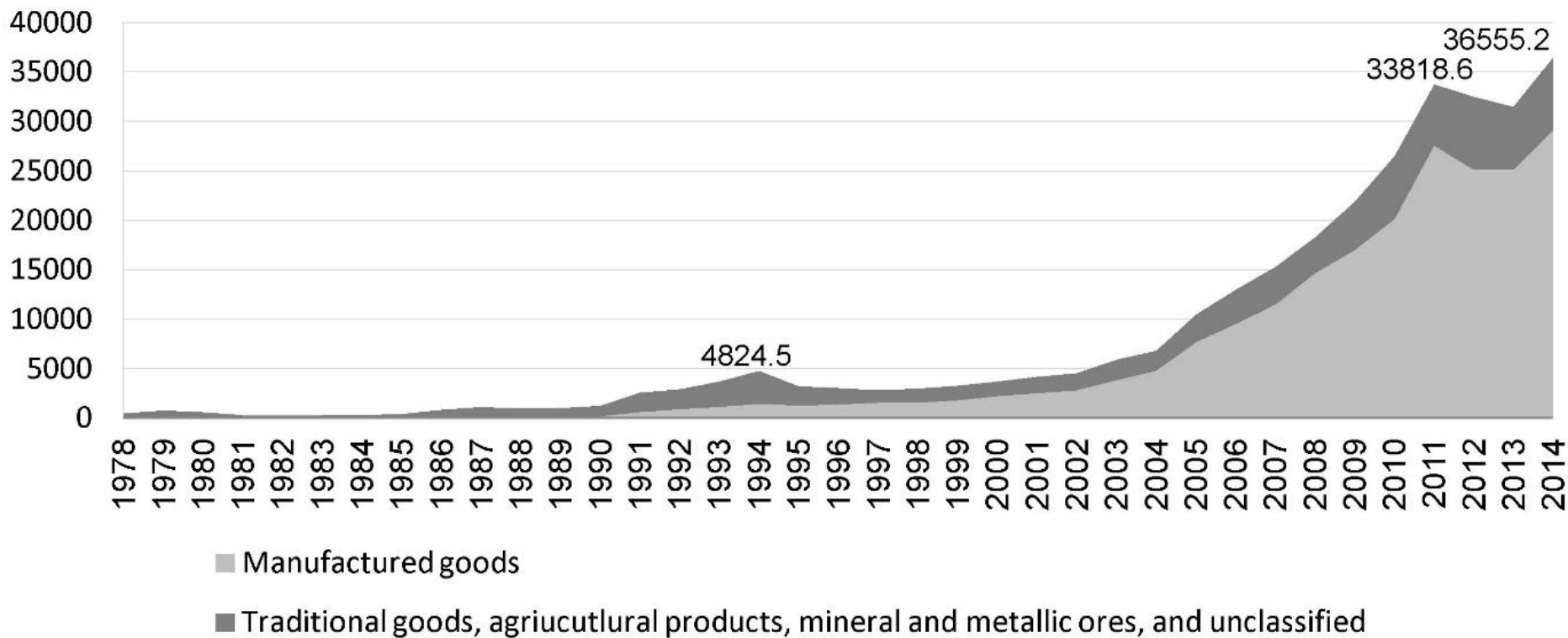
Rates of Unemployment and Labor Force Participation (percent) [Source: World Bank (2017), World Development Indicators (ILO model estimates)]



Enrolment at Institutions of Higher Education [Source: SCI (2016), Time series data]



Sector Shares of Employment (percent) [Source: SCI (2016), Time series data]



Non-oil exports (current million US dollars) [Source: CBI (2016), Time series data]

- No growth in per capita GDP in real terms
- Middle income trap
- Employment problems
- Social policy issues



Toward a capability framework

# Capability Approach

- Main target to develop an environment where capabilities – in the broad sense of the word – are developed
- It requires an “embedded” and “autonomous” state to start the process of capability development that also includes the development of state capabilities.
- The strategy’s discernable result is the enhancement of firms’ capabilities in manufacturing, product development, technology acquisition and development, and marketing.
- Basic and higher education, and vocational and on the job training, are important.
- But the scope of a capability-oriented industrialization strategy is not limited to this simple human capital development.

# Capability Enhancing Networks

- Goal to develop a capability-enhancing network, comprising
  - the state
  - firms
  - trade associations
  - labor unions
  - universities and other research centers
  - local administrative bodies
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# Role of the State in Capability Development

- to make sure that its own capabilities are developed;
- to provide the right incentives and disincentives to firms so that their capabilities in turn improve overtime;
- to keep a close relationship with the civil society while keeping its own autonomy;
- to mobilize savings and direct investments into priority projects;
- to successfully engage in direct production of those goods and services that are vital in the social production process but may be beyond the scope of the private sector;
- to switch policies as the economy evolves and requires new strategies.

- Firm level:
  - the state may provide a system of incentives and disincentives to develop firms' technical, managerial, marketing and R&D capabilities.
  - At times the state may resort to protection to permit the firms to develop these capabilities.
  - State manages to have them eventually exposed to foreign competition so that their capabilities become competitive.
  - Once they become competitive, they can also bring in the needed cash through their exports.
- Civil Society Institutions :
  - the state develops a close relationship to address their needs
  - State gets feedback from them to reach a consensus on development projects.
- Universities and other research institutes level:
  - the state assures their development
  - State induces them to enhance their links to firms so that their knowledge production gets translated into manufacturing production.