

The role of Iran's education system in human capital formation

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Basic questions

- Does education improve labor market outcomes?
 - Probability of employment?
 - Earnings?
- Is Iran's education system effective in enhancing skills?
- What are potential barriers to skill formation?
- What is the role of labor and education institutions?

Outline

Introduction

Stylized Facts

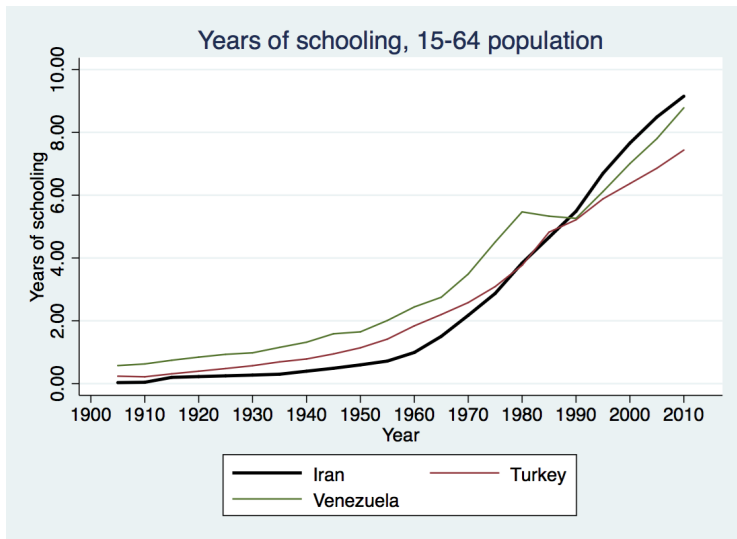
Conceptual Framework

Higher Education

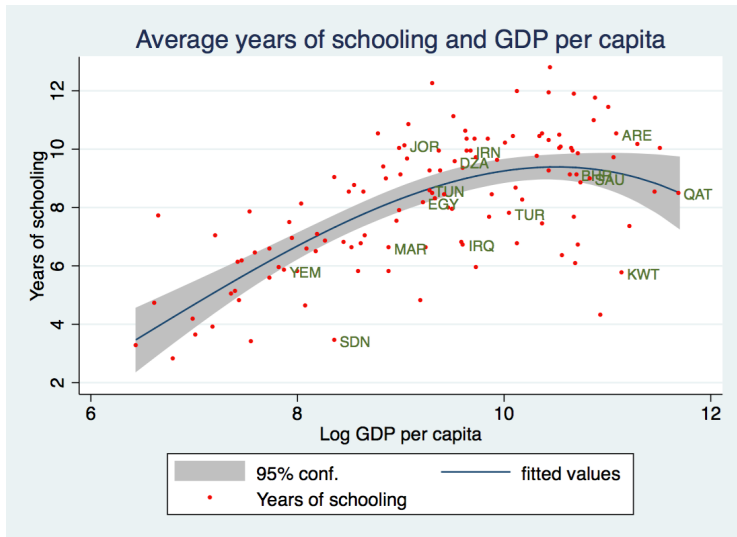
TVE

Reform policies

By and large Iran was successful in increasing educational attainment



Even in a regional and global context

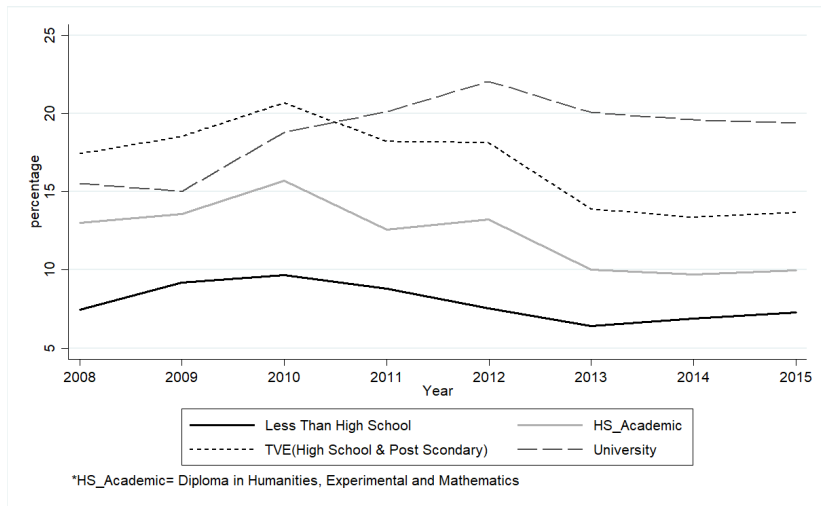


But achievement is lower than global average (500), and lower deciles are falling behind

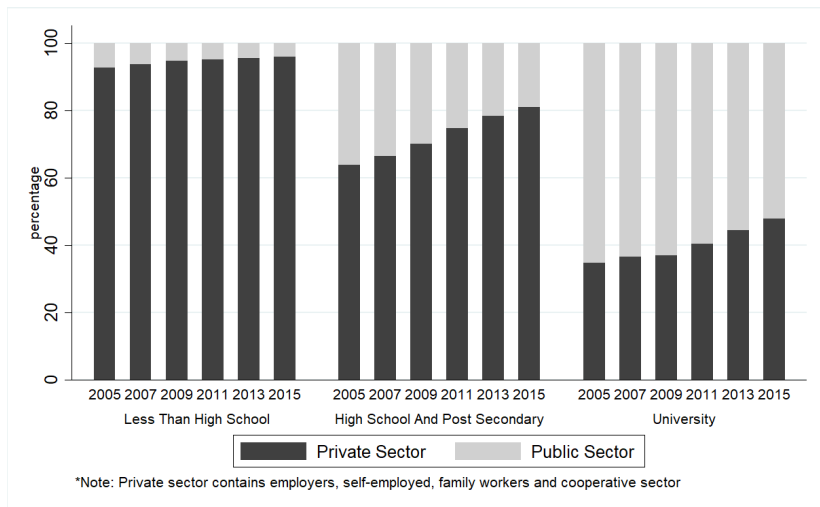
Table: Changes in TIMSS Math and Science Scores, 1995-2015

	Average	p10	p20	p50	p80	p90	Change p90-p10
<i>Math</i>							
1995	419	327	356	417	482	517	190
1999	423	329	357	419	486	525	196
2003	414	328	353	407	473	509	181
2007	414	308	340	410	485	528	220
2011	449	307	340	412	493	539	232
2015	444	326	361	439	526	566	240
<i>Science</i>							
1995	465	380	408	464	521	551	171
1999	450	356	386	448	512	548	192
2003	456	369	396	454	514	544	175
2007	470	366	400	467	541	575	209
2011	478	366	402	478	552	589	223
2015	463	352	386	462	536	574	222

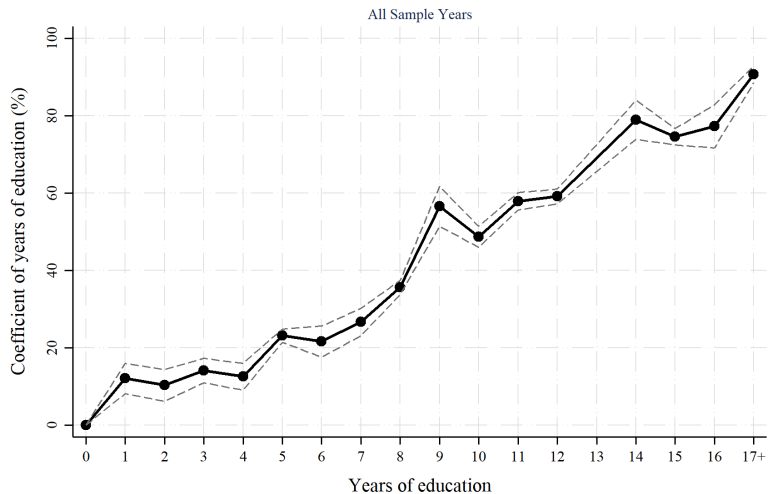
Labor market outcomes also disappointing: High and rising unemployment of educated workers



Declining share of public sector employment



Convexity of returns to education



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A simple conceptual framework

How should we think about the process of human capital accumulation? Is there a model that could explain the stylized facts?

- Interaction of markets for *Education* and *Labor*
- Actors
 - Individuals: How much to invest in human capital?
 - Employers: What types of skills to demand and how to reward them?
 - Educational institutions: What types of skills to supply?

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Ideally signals sent from employers to individuals and educational institutions coordinate actions. Educational institutions amplify labor market signals.

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All these justify state intervention in both markets not just to alleviate market failures but also to increase equity and social mobility.

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- A mandate to protect workers resulted in rigid labor regulations.
 - Employers put greater weight on ex ante signals of quality: credentials.

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- Those with good enough credentials get a job. The majority have invested in skills not needed by private employers.
- Government response to this was/is
 1. Expand higher education.
 2. Track out less able students to non-academic routes.
 3. Give priority to university graduates in Active Labor Market Policies.

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The heavy weight of state in higher education

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 - Raised the bar in employment, ratcheting up demand to M.Sc. and Ph.D. → further expansion of higher education.
 - Competitive recruitment examinations!

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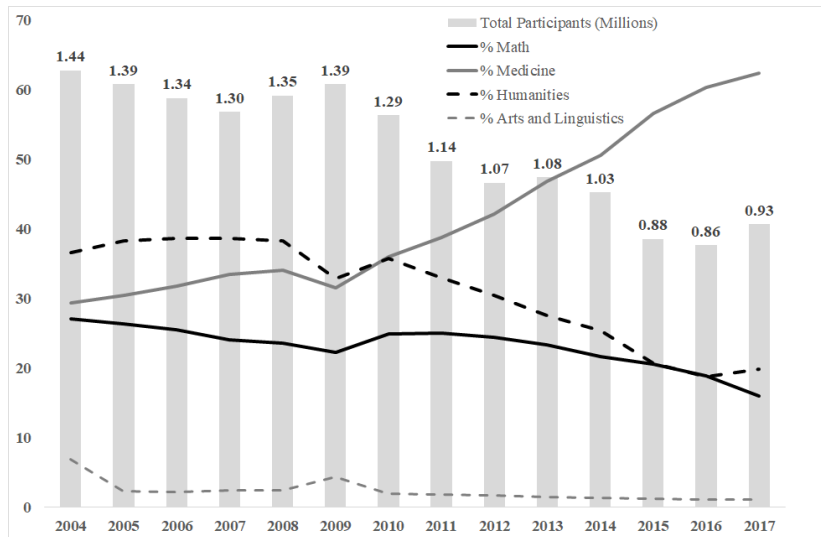
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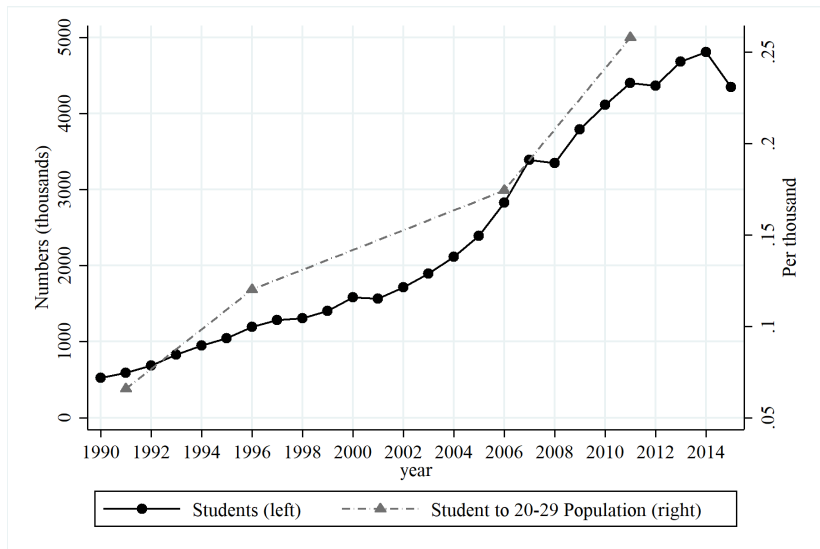
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- Resources needed to survive in this competition is a killer of social mobility.

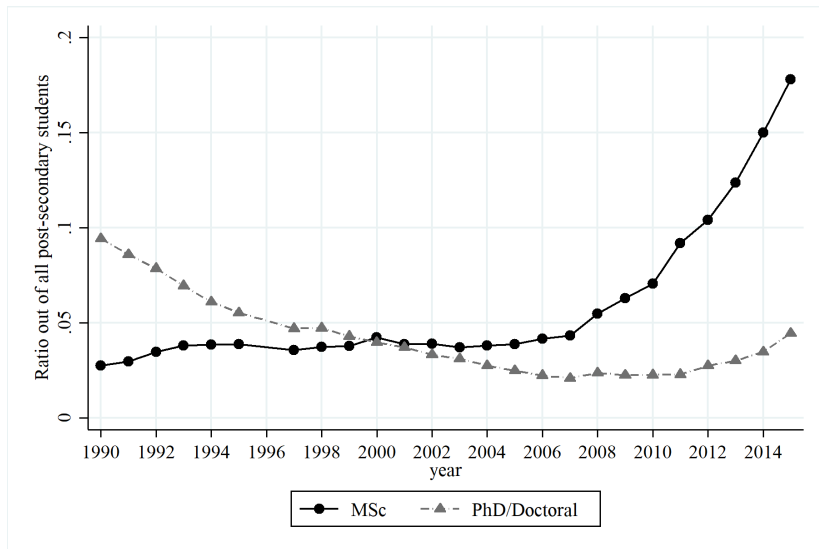
Intense competition to enter university



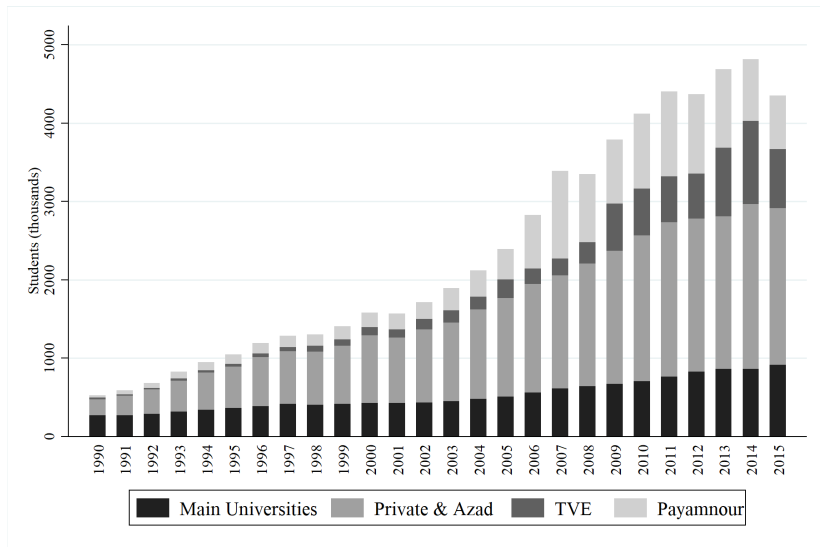
Sharp increase in higher education



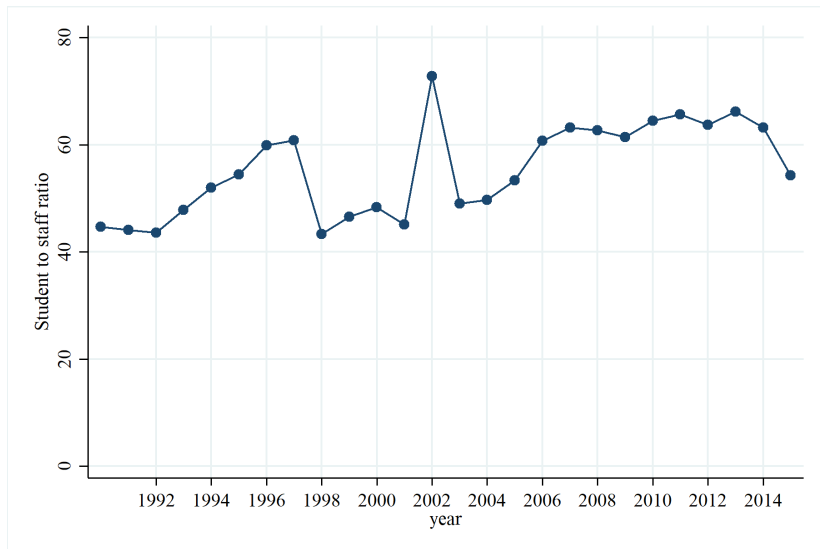
Followed by sharp increase in post-graduate degrees



Expansion mainly coming from new and private universities



A gentle rise in student to staff ratio in universities



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- Most TVE graduates work in micro enterprises or remain self-employed. This reduces returns and job security.

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- But these neither have the incentives nor the ability to engage with the education system.
- SMEs and larger enterprises are better off investing in rent-seeking than in establishing links with education entities.

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Coordinated education and labor market reform policies

- Create a coherent skill quality assurance system to improve information flows between employers and workers.
- Rank schools and universities according to job placement to create competition and better responsiveness to market signals.
- Pull out current form of government funding and move towards a pupil-linked funding format: school vouchers and student loans are some examples.
- Add a wider range of skills to *concour*: writing and listening.
- Removing numerical grades for the first four levels was in the right direction but the recent restructuring was not aimed at the right issues.
- Rigid labor laws weaken the signals sent from private employers to students and educational institutions.

Key questions to be answered

- What should the government do to promote employment of TVE and high school graduates?
INSTEAD of What should the government do about high unemployment rate of graduates?
- How to deal with the current stock of graduates not to distort incentives for future students?
Do not give priority to higher education over high school or TVE graduates.
- What is the best way to guide students to careers that suit them best?