



Meeting the Demand for Skills in Indonesia

A supply-side perspective

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Three General Objectives for the Education Sector

Provide the right level of skills

- ✓ What's the *skill base* of Indonesian workers?
- ✓ What is the demand for skilled workers?

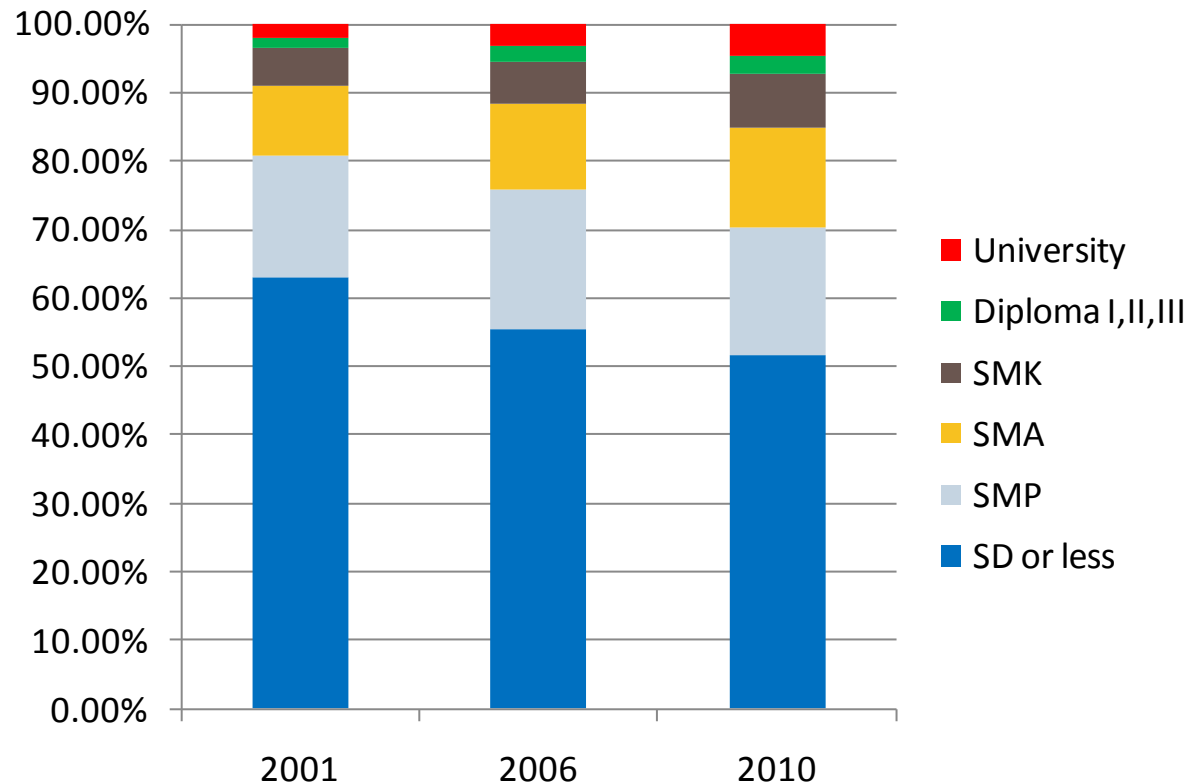
Provide skills in the right areas

- ✓ At all levels of education:
 - Basic Education
 - Vocational (SMK)
 - Non-Formal
 - Higher Education
 - Advanced human capital

Facilitate skills upgrading

- ✓ Provide opportunities for skills upgrading:
 - TVET
 - Polytechnics
 - Graduate Education

Most Indonesians have less than secondary



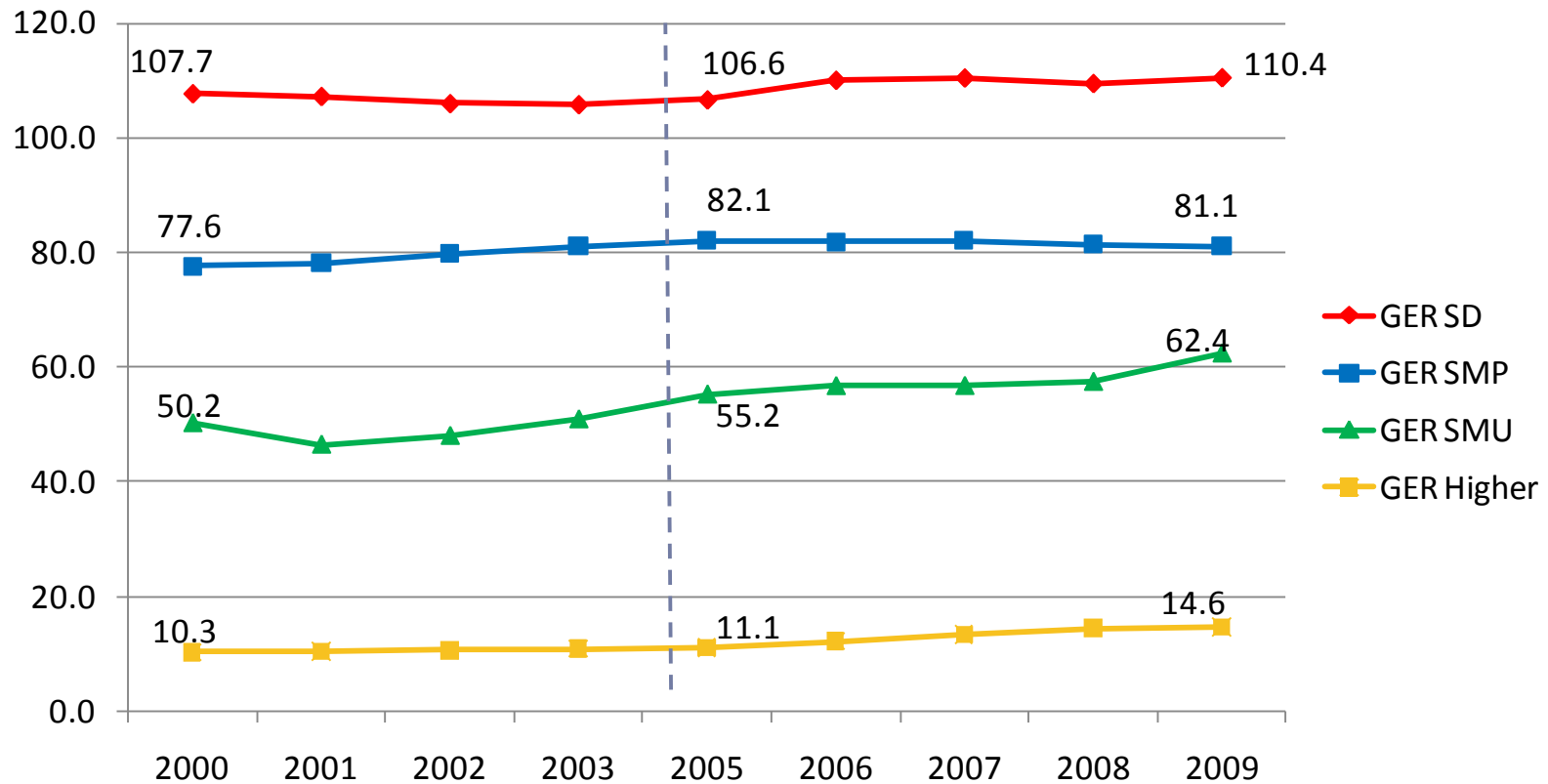
Source: Sakernas, various years

SKILL LEVEL

SKILL AREAS

SKILLS
UPGRADING

Indonesians will continue to get more educated



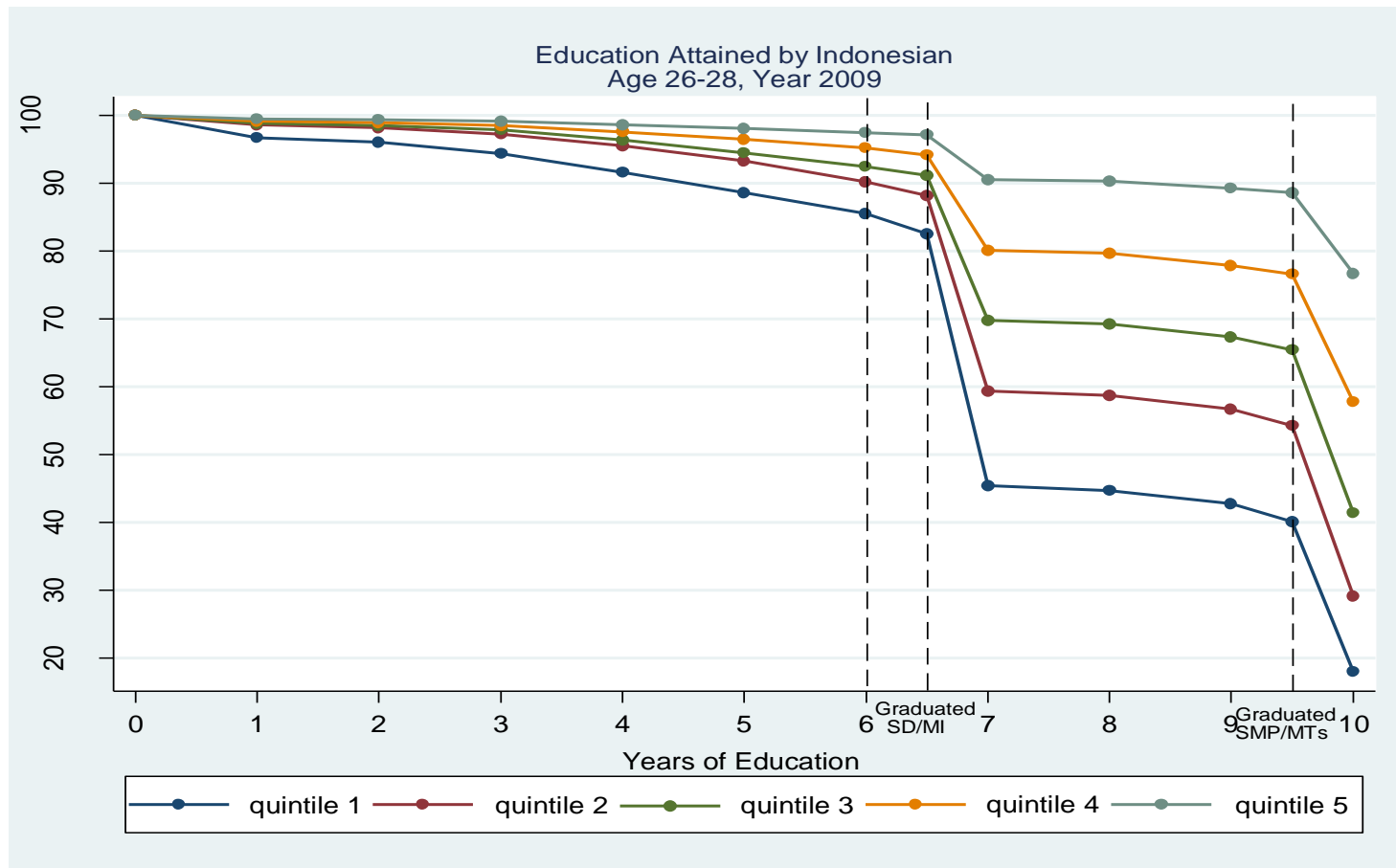
Source: Susenas, various years

SKILL LEVEL

SKILL AREAS

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But the poor still drop out too early



Source: World Bank calculations, Susenas 2009

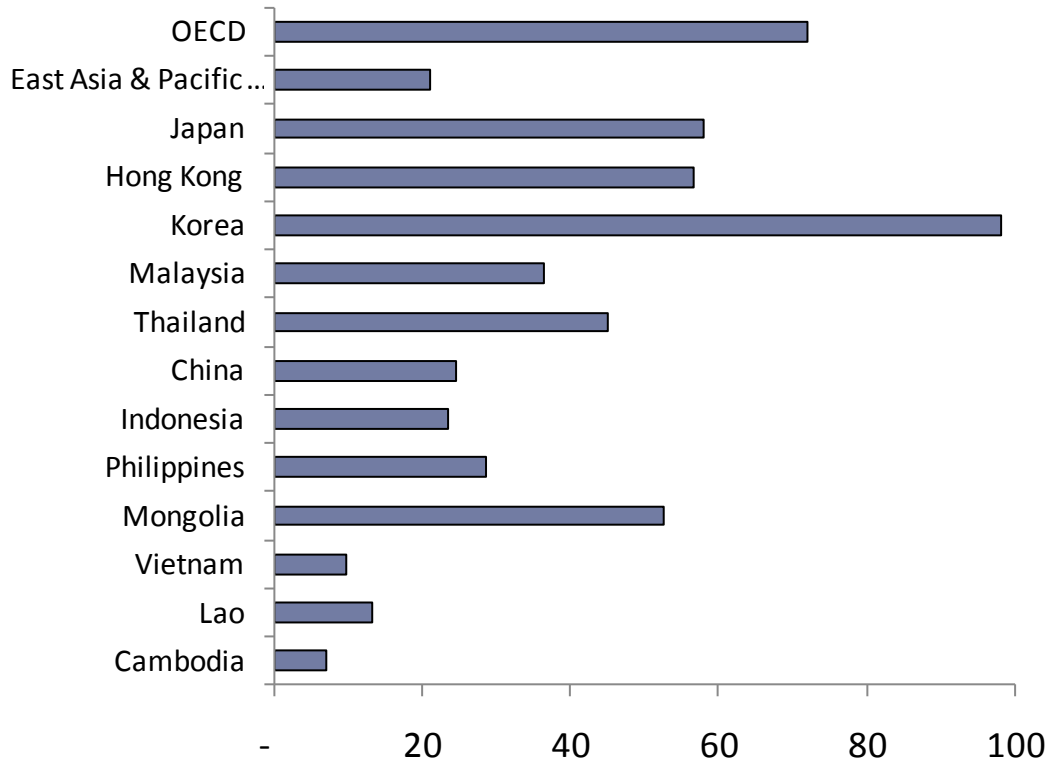
SKILL LEVEL

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And still have a long way to go beyond Basic education

Tertiary Education GER



- ✓ Indonesia lags behind the region in secondary and higher education
- ✓ large inequalities in access to secondary and higher education

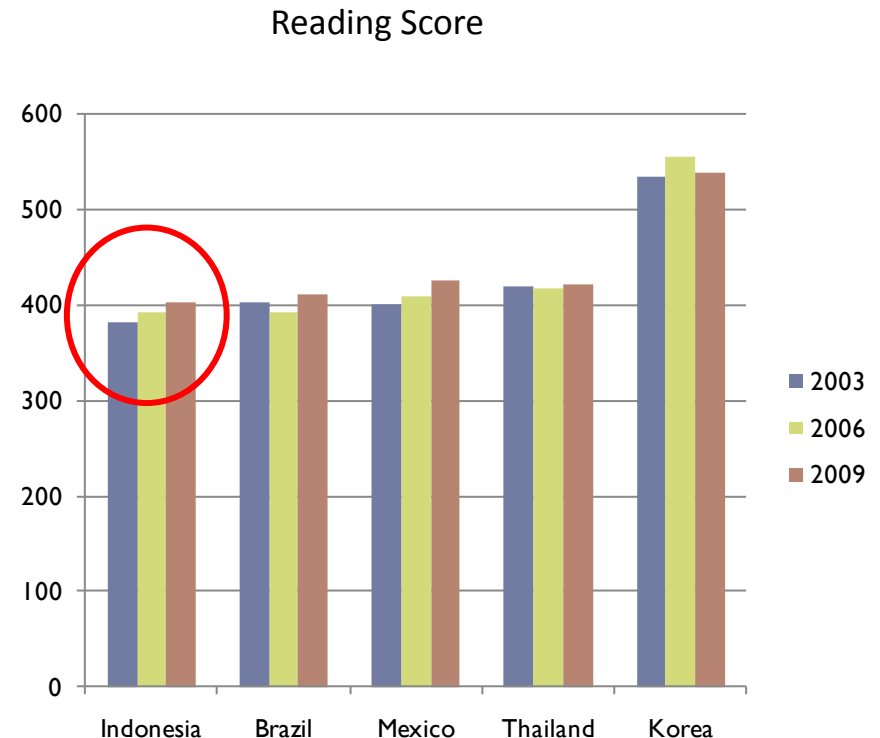
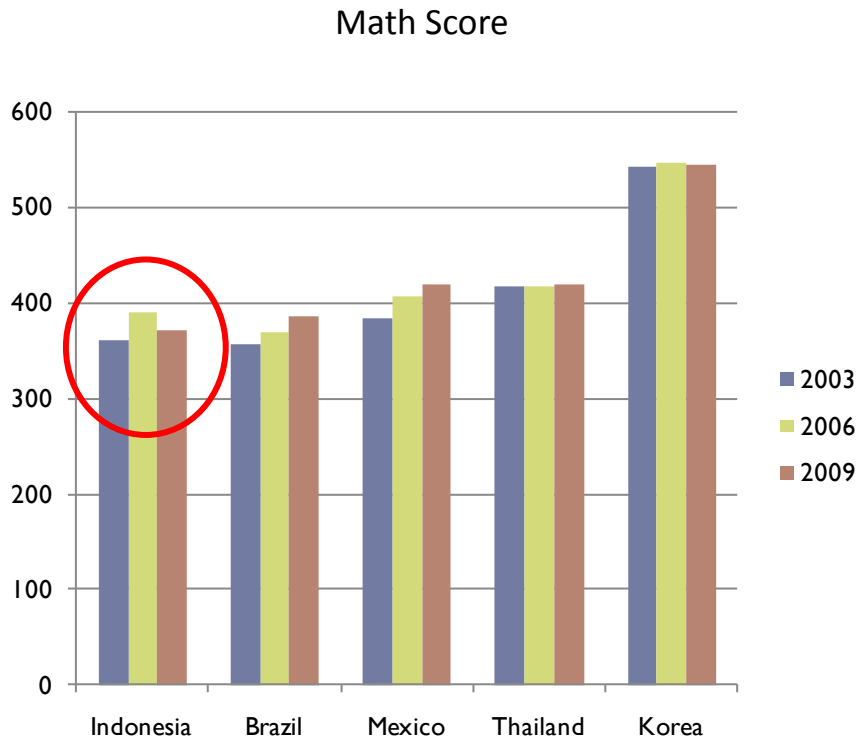
Source: Unesco Institute for Statistics, 2009

SKILL LEVEL

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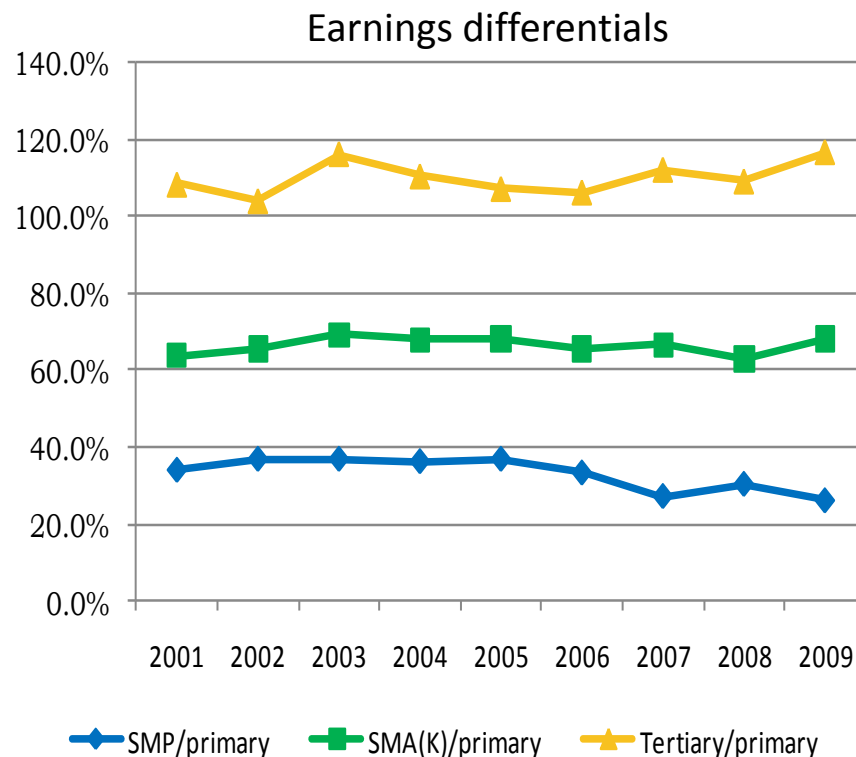
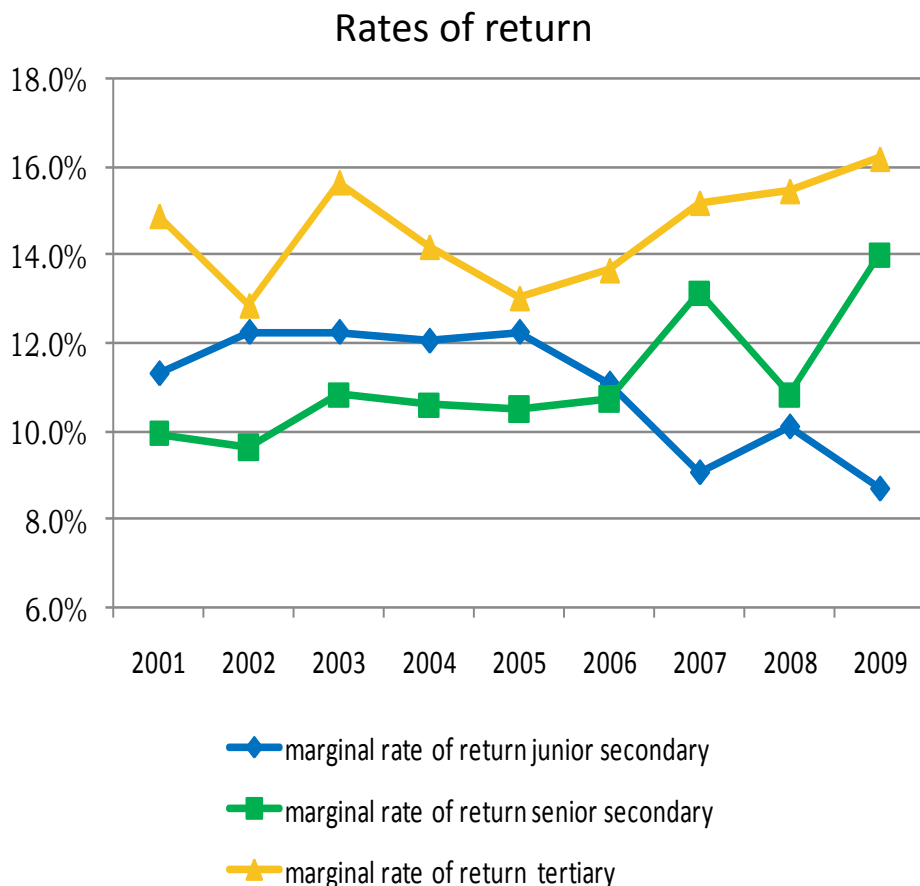
Those staying in school, learning outcomes are low



Source: OECD, PISA (2009)



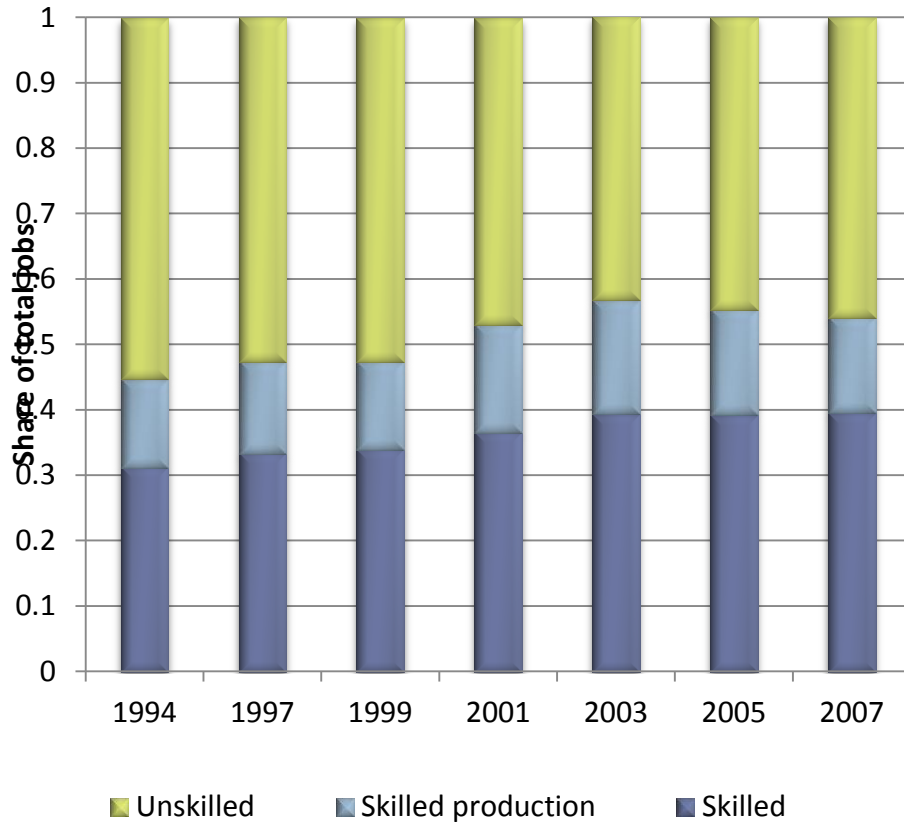
There is a sustained demand for skilled workers



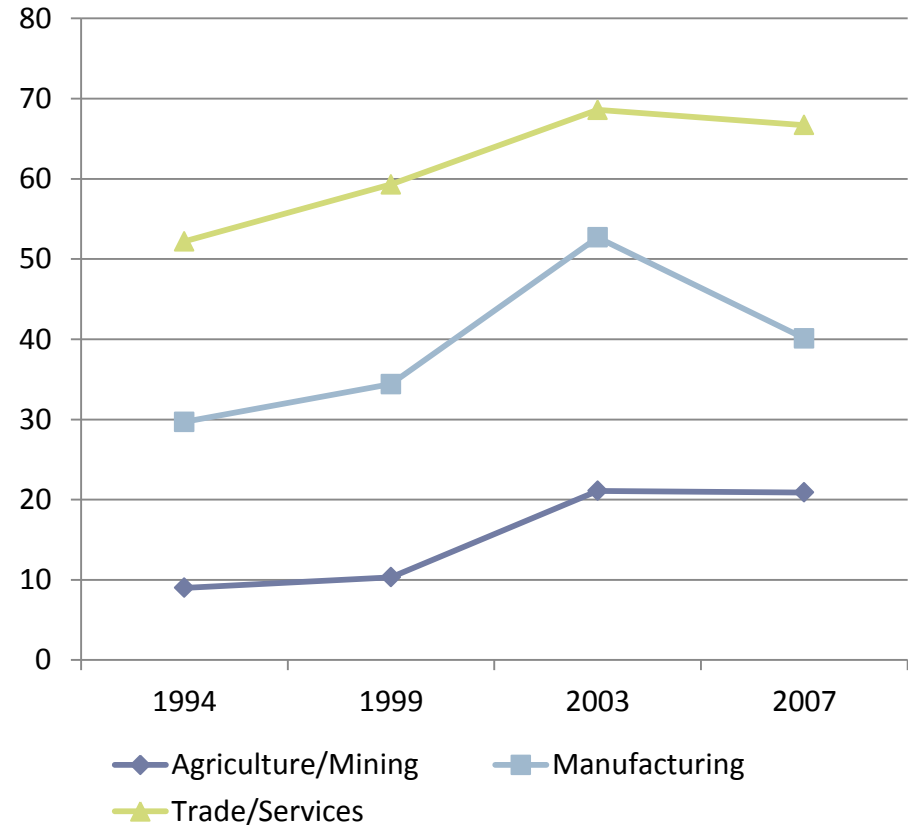
Source: SAKERNAS (employed for wages),
 * Minimum wage increase of 10%+ in 2008



And skilled employment seems to be picking up



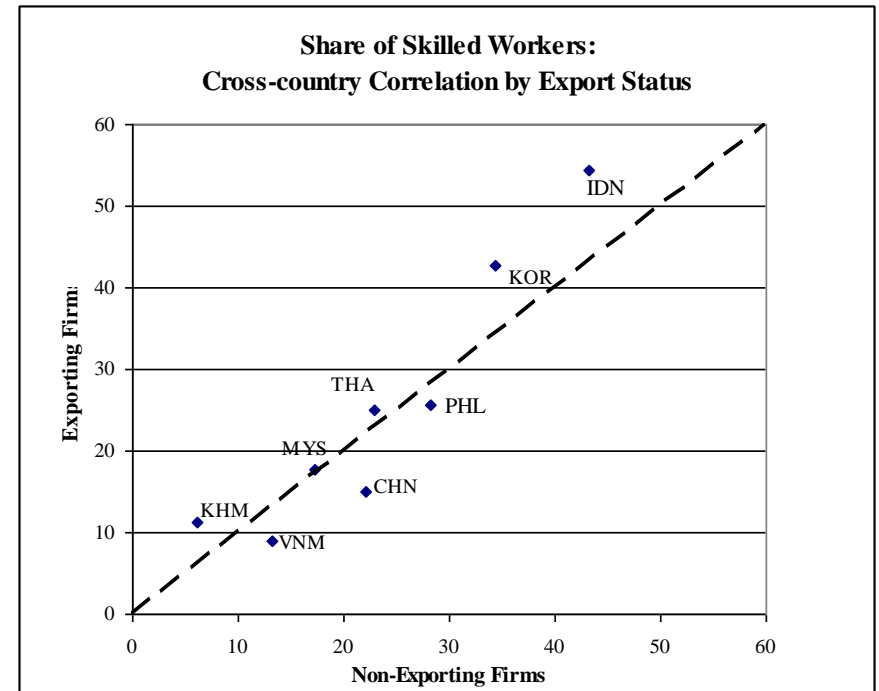
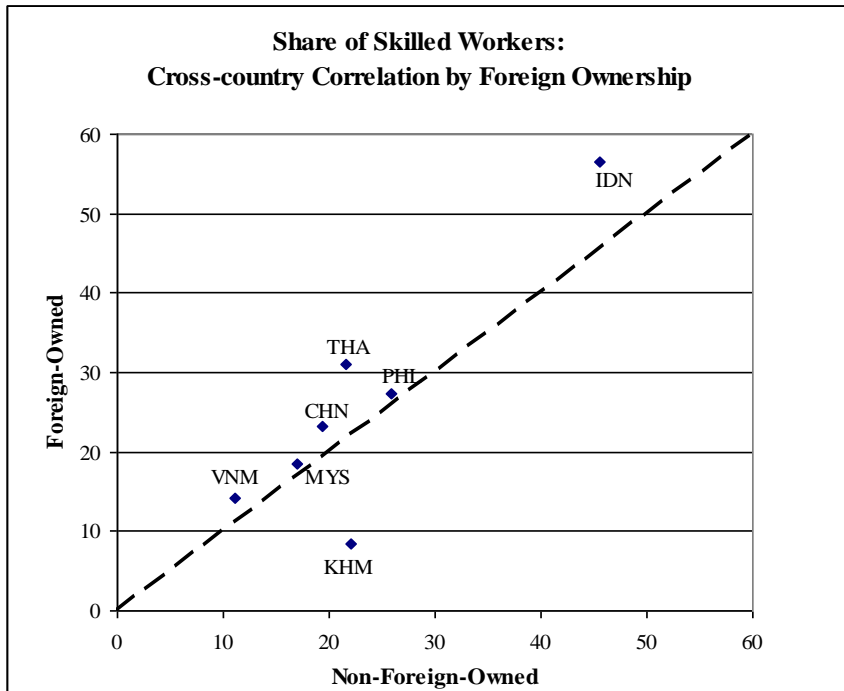
Source: Sakernas, various years



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Openness is associated with higher demand for skills



Source: Higher Education Regional Study, World Bank, forthcoming



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- ✓ The demand is likely to grow

Provide skills in the right areas

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How can we know the areas with demand?

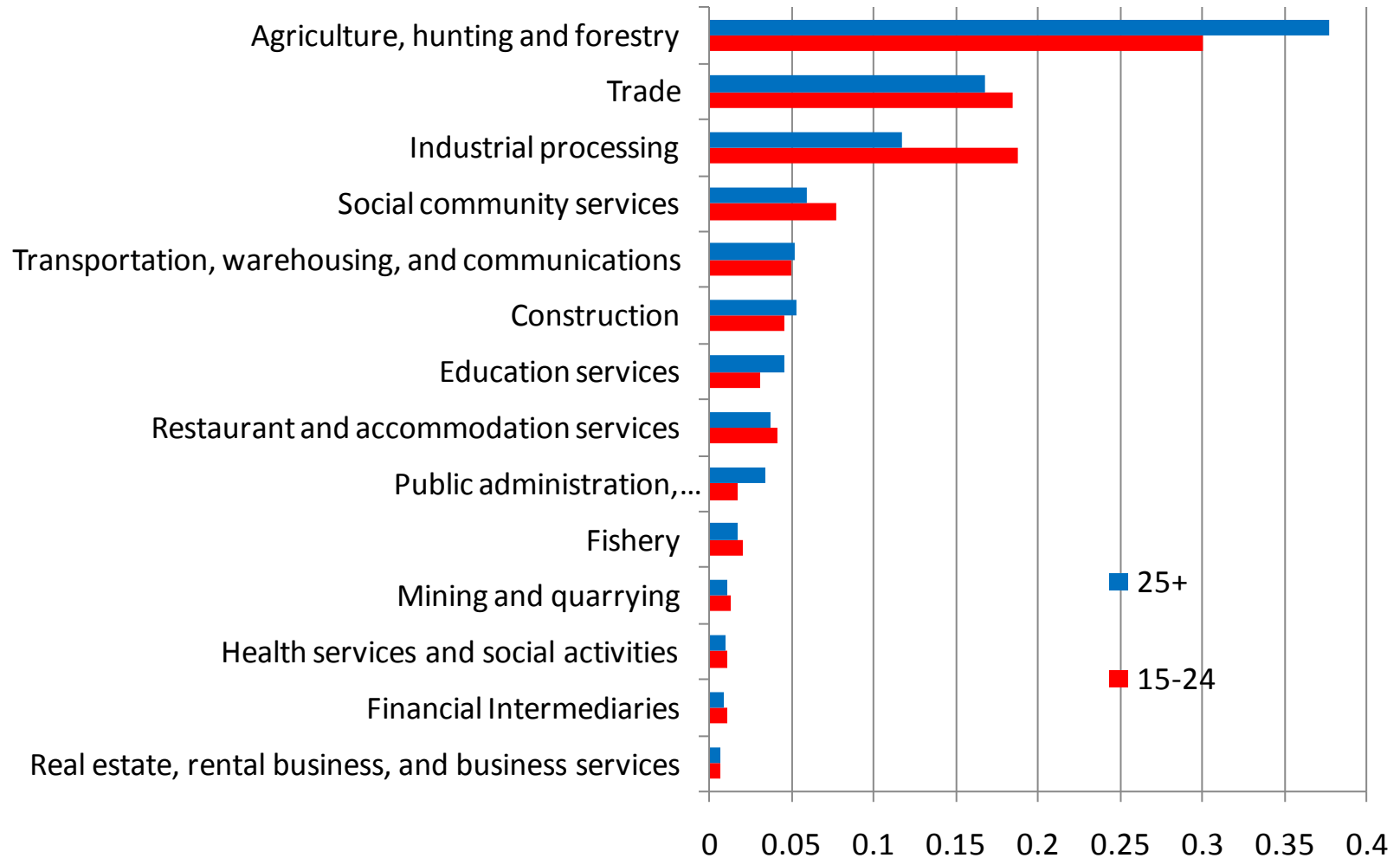
- ▶ Forecasting human resource needs by sector is difficult
 - ▶ Macroeconomic situation and job creation
 - ▶ Changes in economic structure
 - ▶ Changes in production methods
 - ▶ Push for innovation may change economic structure
- ▶ The new Economic Master Plan should help forecast broad areas, but HR planning in the document is limited
- ▶ The key is *how the system operates and how it responds* to changing needs

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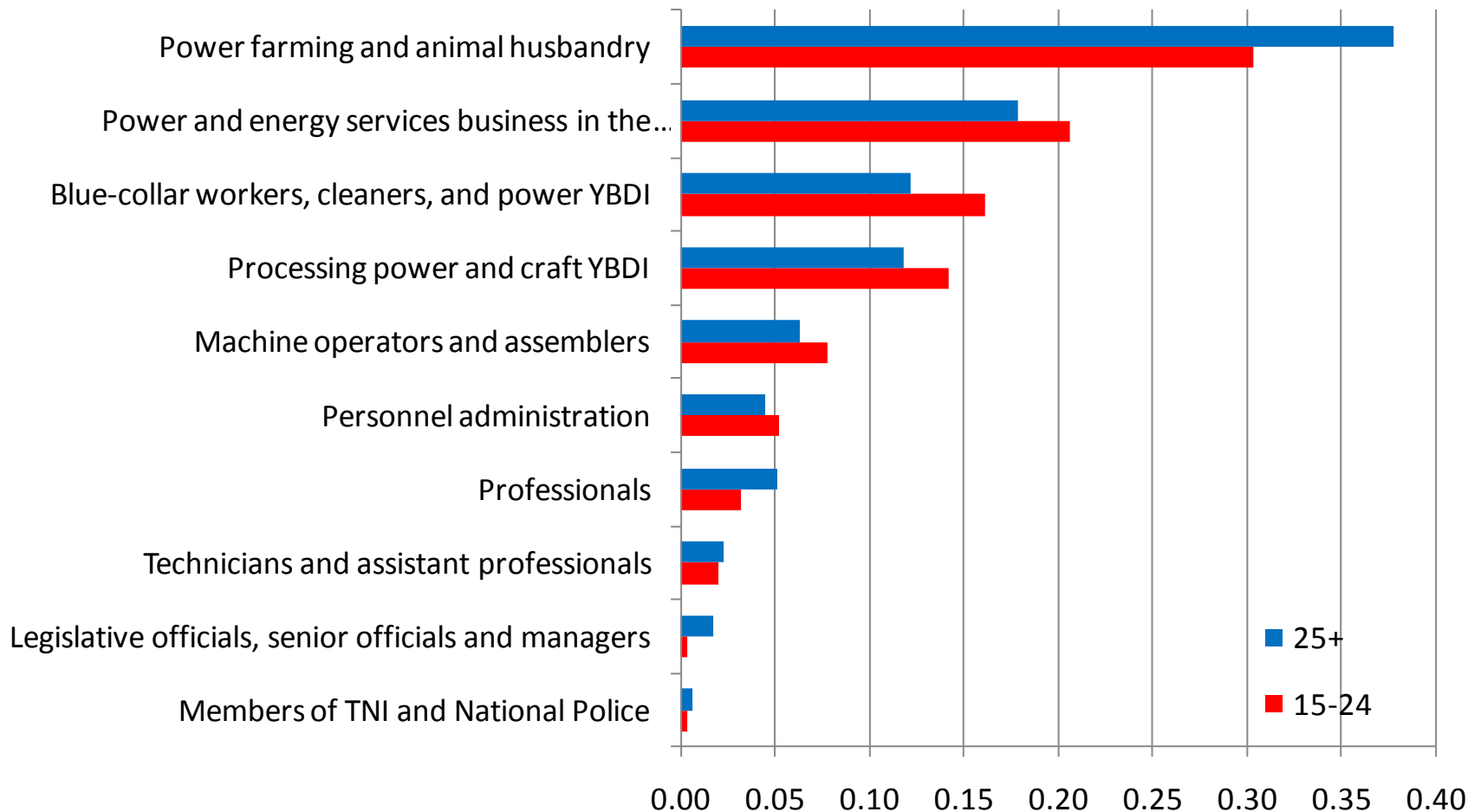
Current youth employment mainly to agriculture and services



Source: Sakernas 2010



The occupations highlight importance of mid-level skills



Source: Sakernas 2010



Economic Plan is focused in 8 programs and 22 activities

ECONOMIC
CORRIDORS

Economic Transformation Master Plan

1. Agriculture
2. Mining
3. Energy
4. Industrial
5. Marine
6. Tourism
7. Telecommunication
8. Development of strategic areas



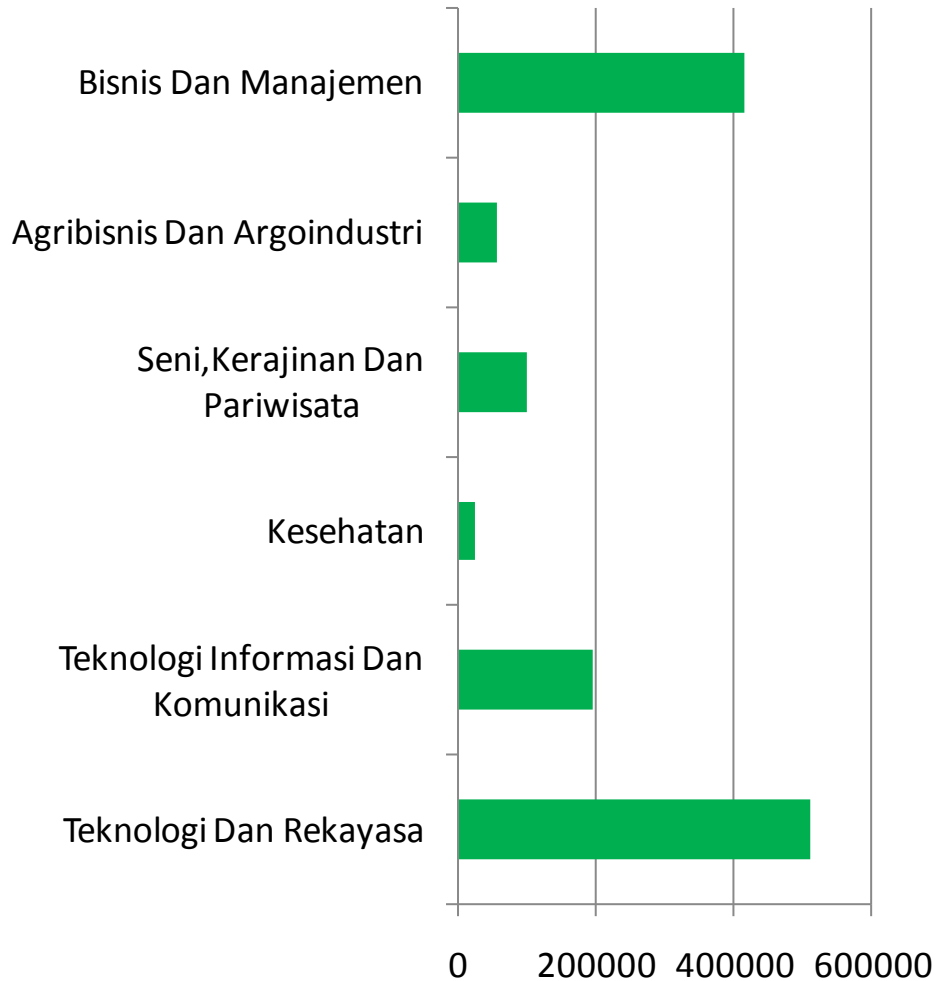
What does this suggest about future demand for skills?

SKILL LEVEL

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Align Vocational School with Local Demands



Source: MoNE, 2010

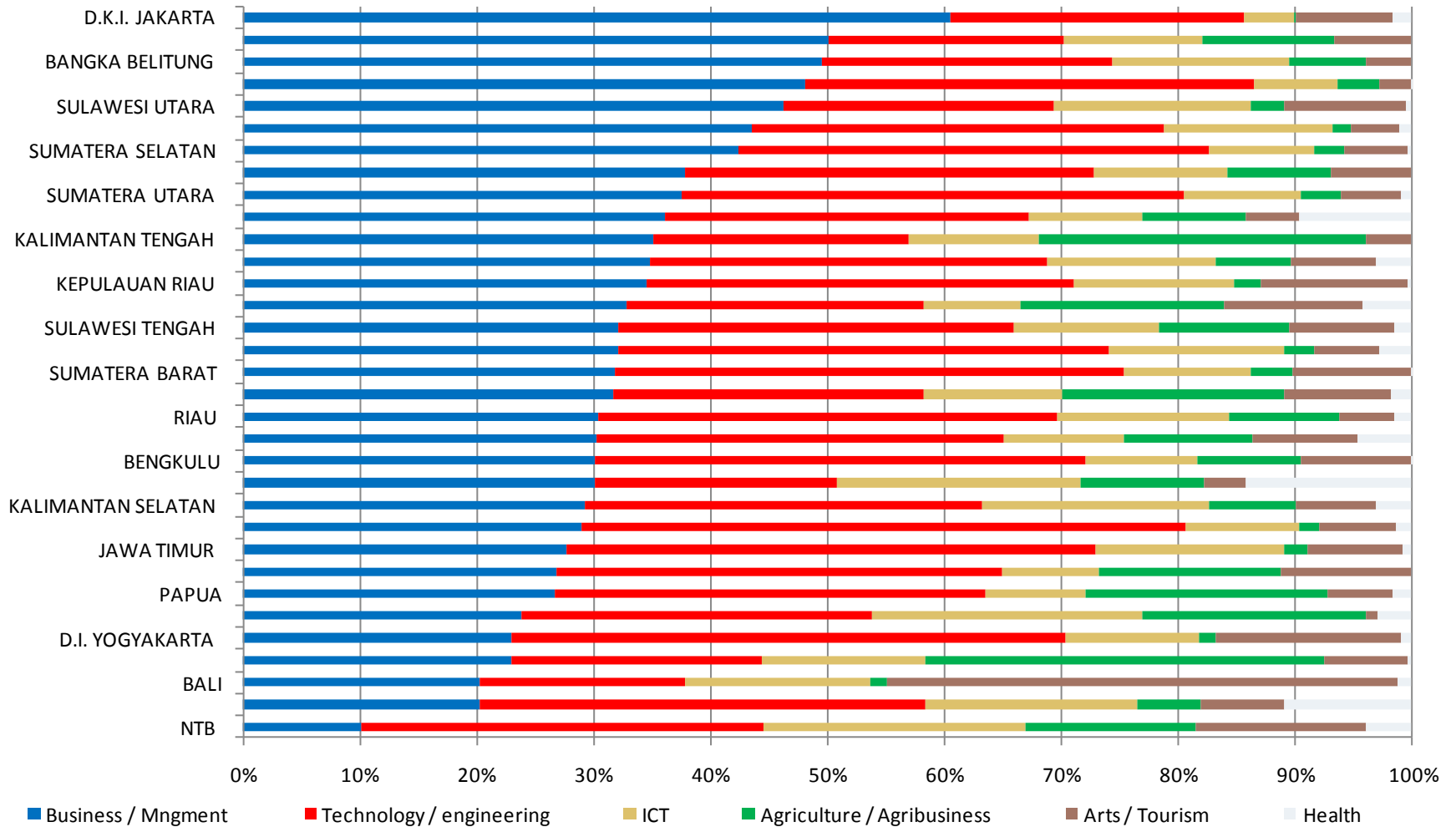
- SMK is mostly private
- The supply of programs may need adjusting:
 - ✓ Some technology/ engineering
 - ✓ Lots of Business / Management
 - ✓ Very little Agriculture
 - ✓ Develop in accordance with “priority sectors”

SKILL LEVEL

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A start: Type of program varies by province

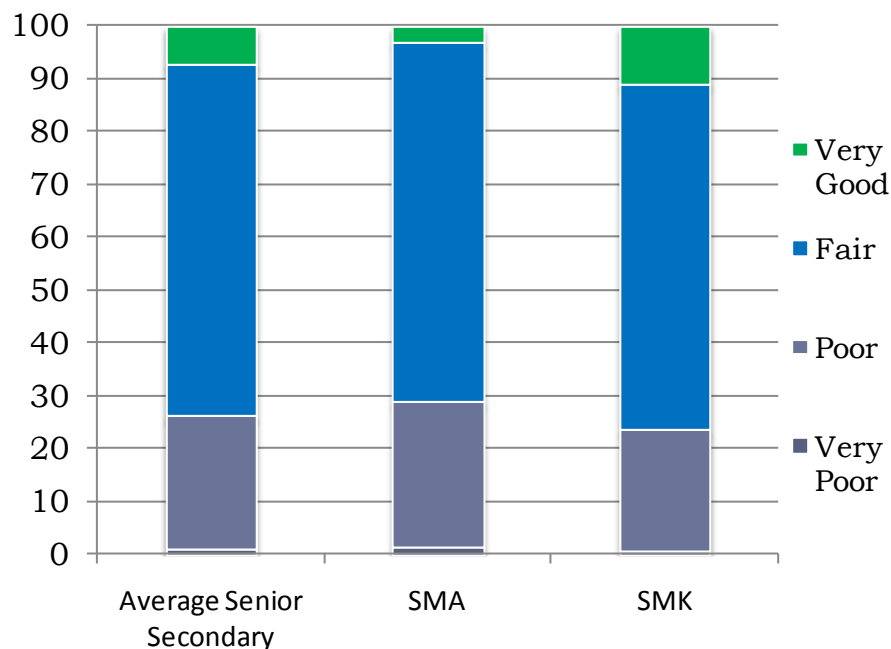


Source: MoNE, 2010

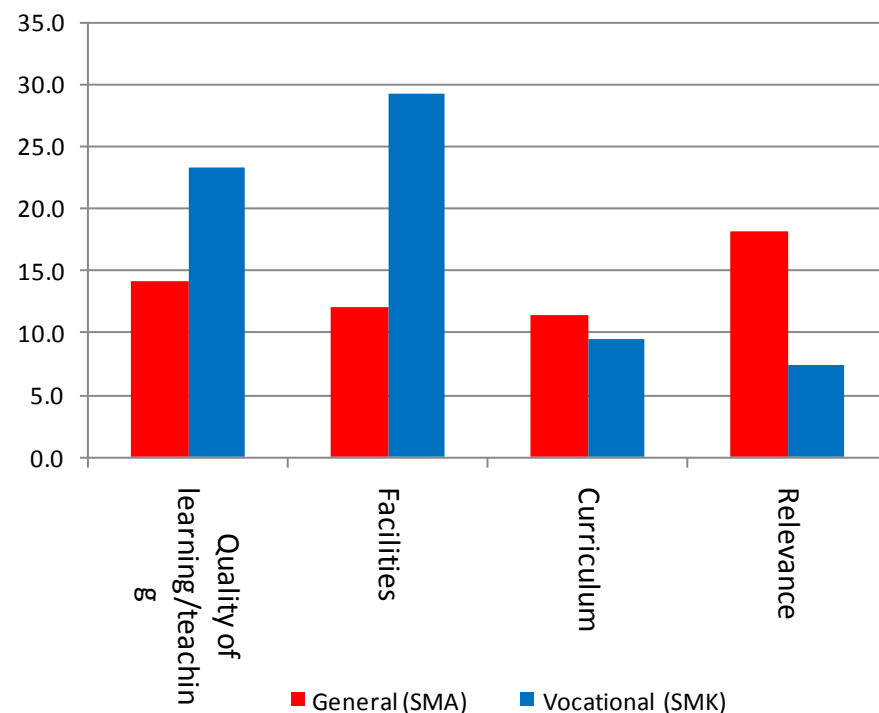


But the quality of the skills needs to improve

Quality of recently hired senior secondary graduates, according to *employers*



Perception of main weaknesses according to recent *graduates*



Source: Indonesia Skills Survey 2008, World Bank (2010)

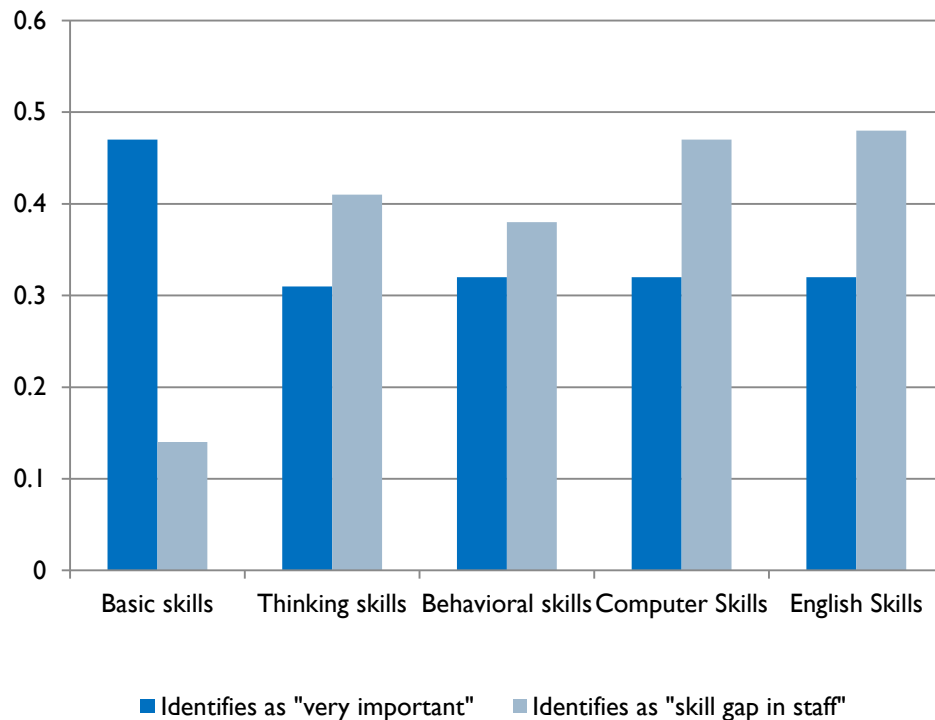
SKILL LEVEL

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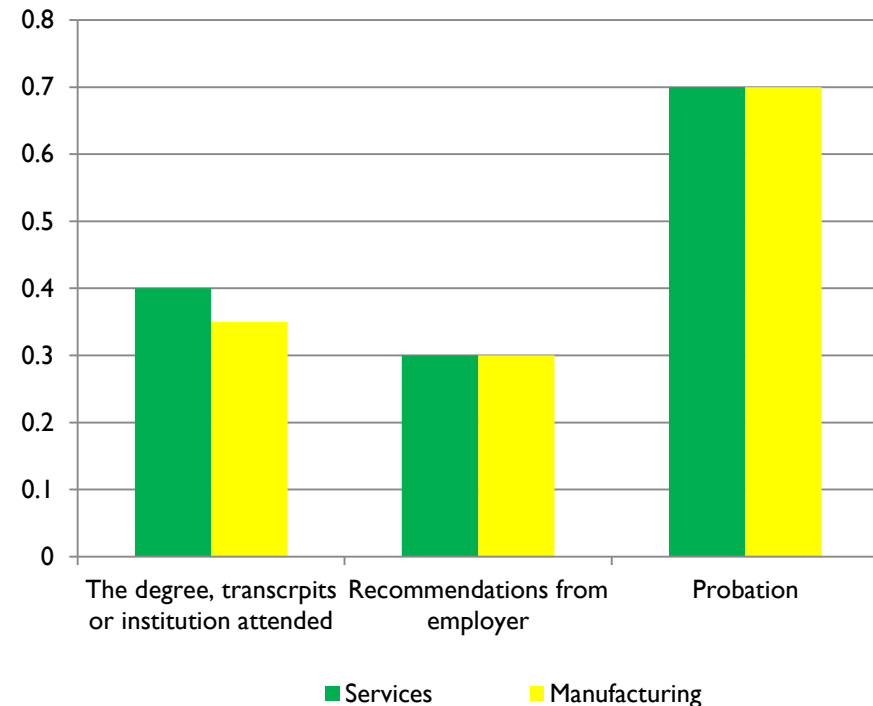
SKILLS UPGRADING

Starting with the Basics: Improving Basic Skills

Types of skills identified as “very important” and “gaps” by employers



Methods for assessing quality of potential employees



Source: Indonesia Skills Survey 2008, World Bank (2010)

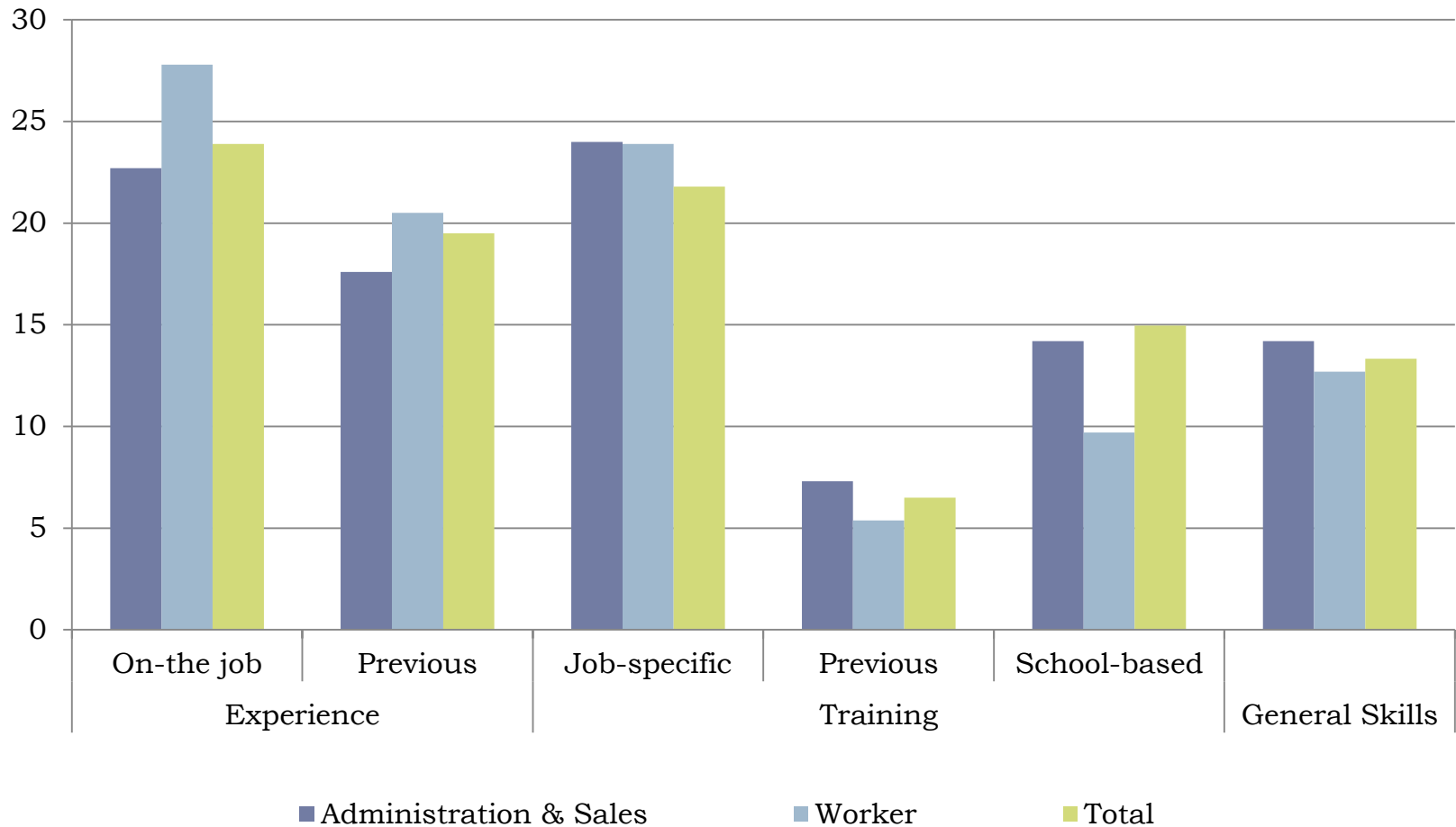
SKILL LEVEL

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And improving *linkages* and *practical experience*

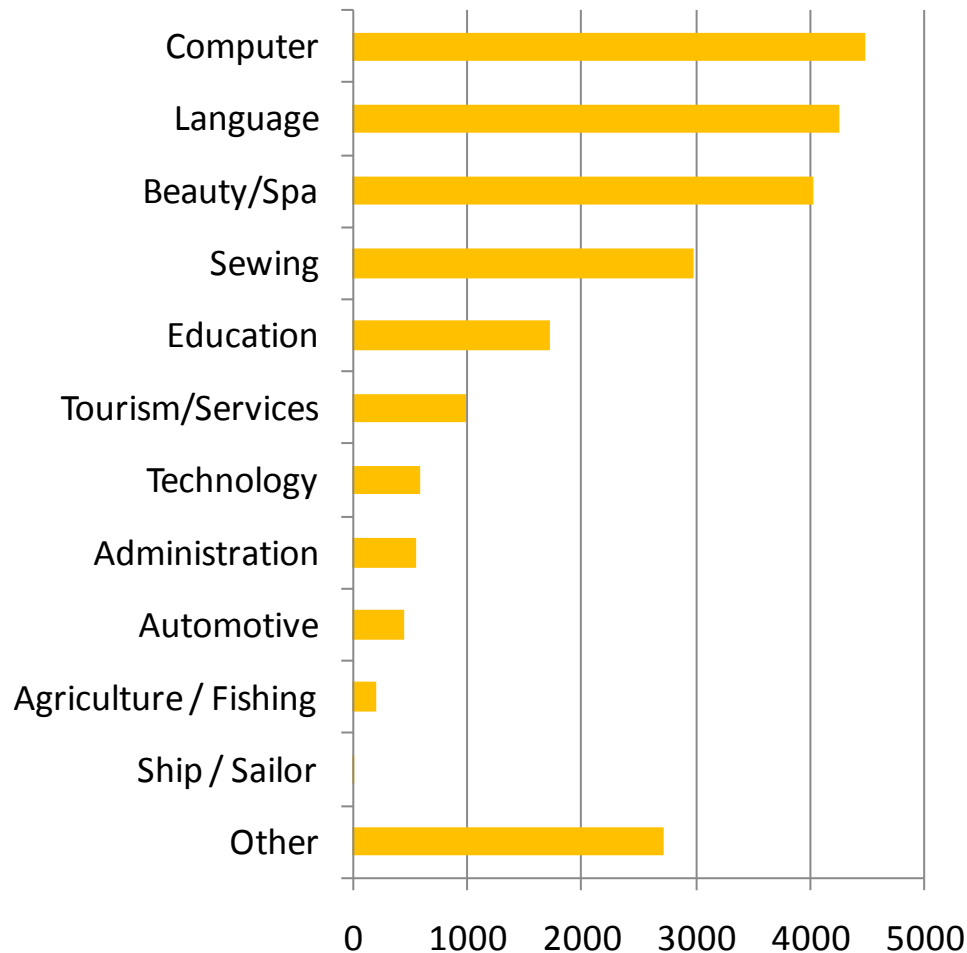
Most valuable asset of employees according to employers



Source: Indonesia Skills Survey 2008, World Bank (2010)



Develop a Relevant Non-Formal Training System



- The current system is focused on very basic vocational skills
- Very little Agriculture and Technology
- Almost non-existent for some “priority sectors”

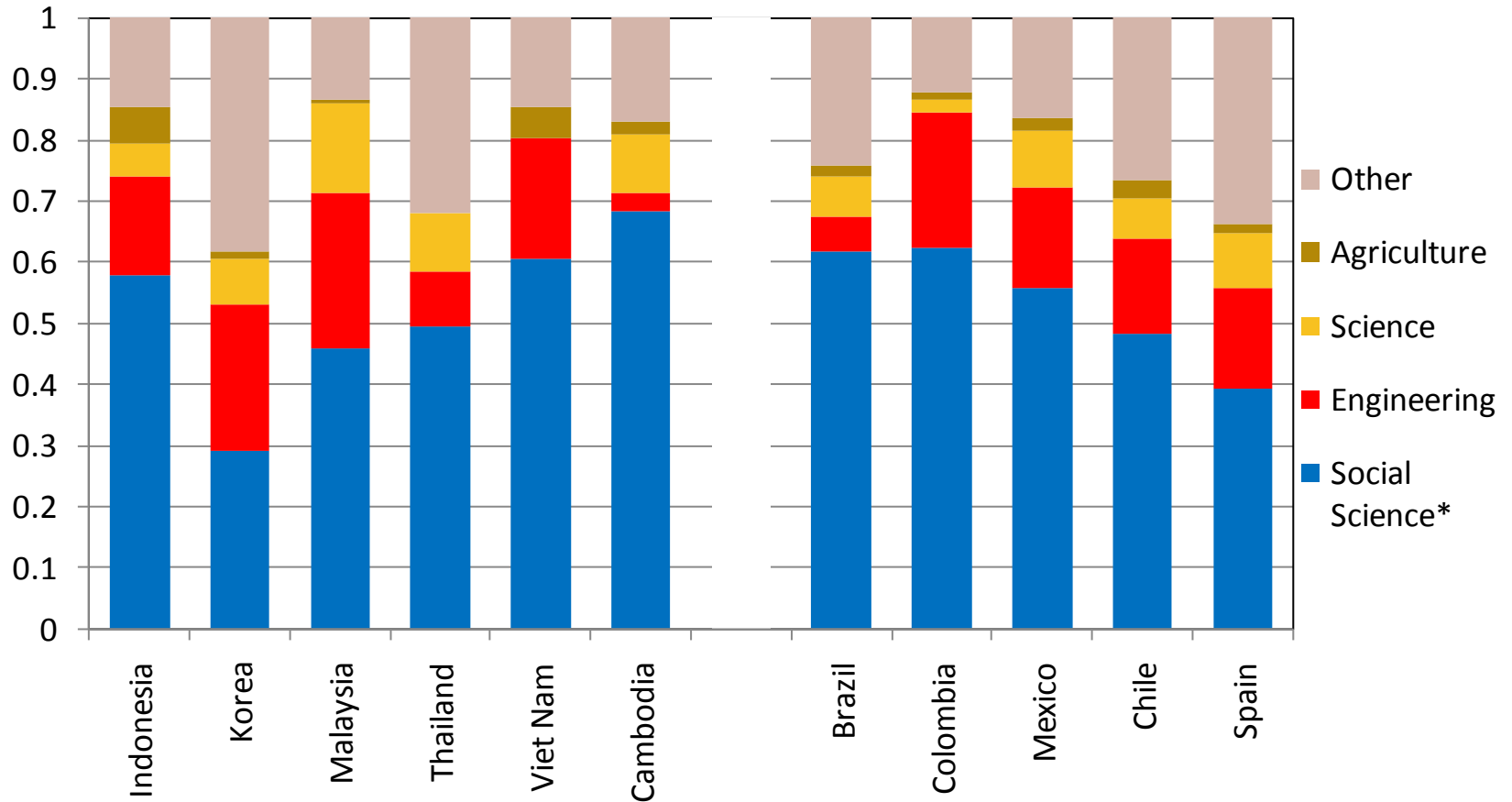
Source: MoNE, 2010

SKILL LEVEL

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Higher education is also biased towards social sciences



Source: MoNE and UNESCO Institute of Statistics, 2010

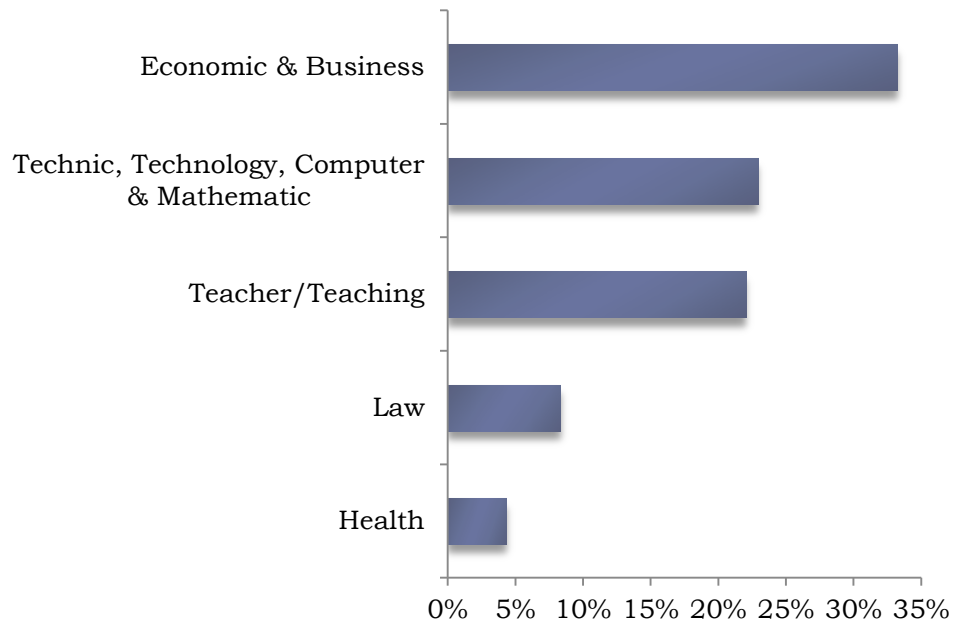
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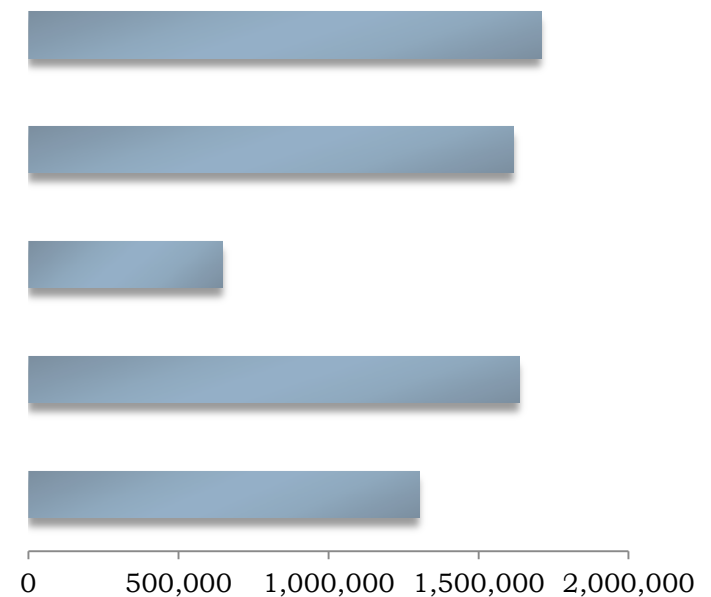
There is some evidence of field mismatches

Tertiary Enrollment by Major



Source: MoNE (2009)

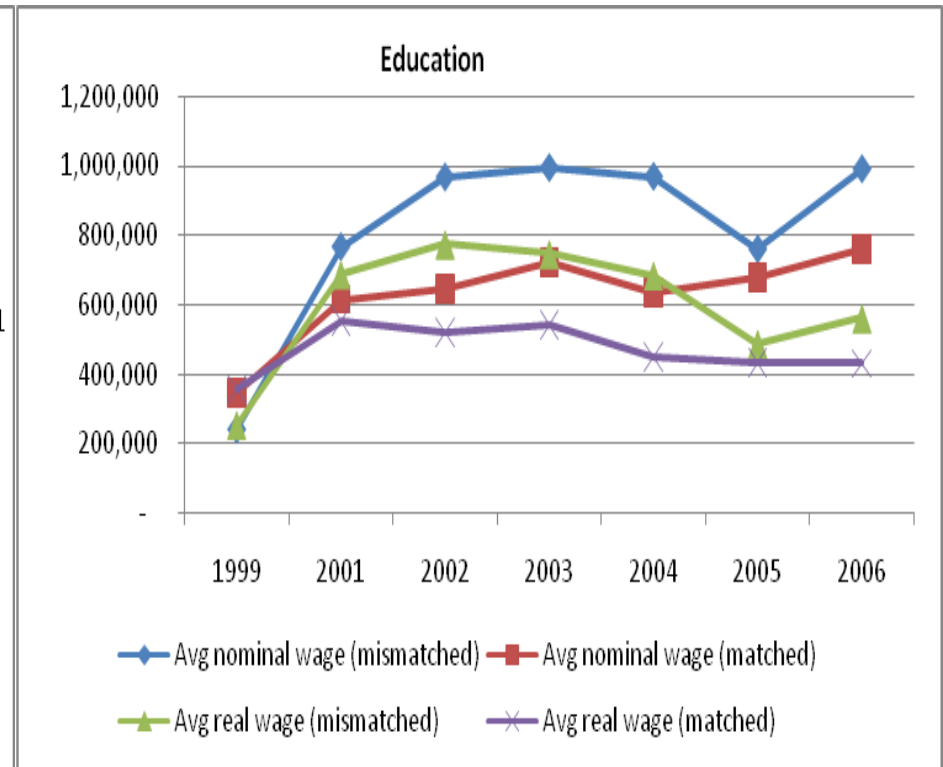
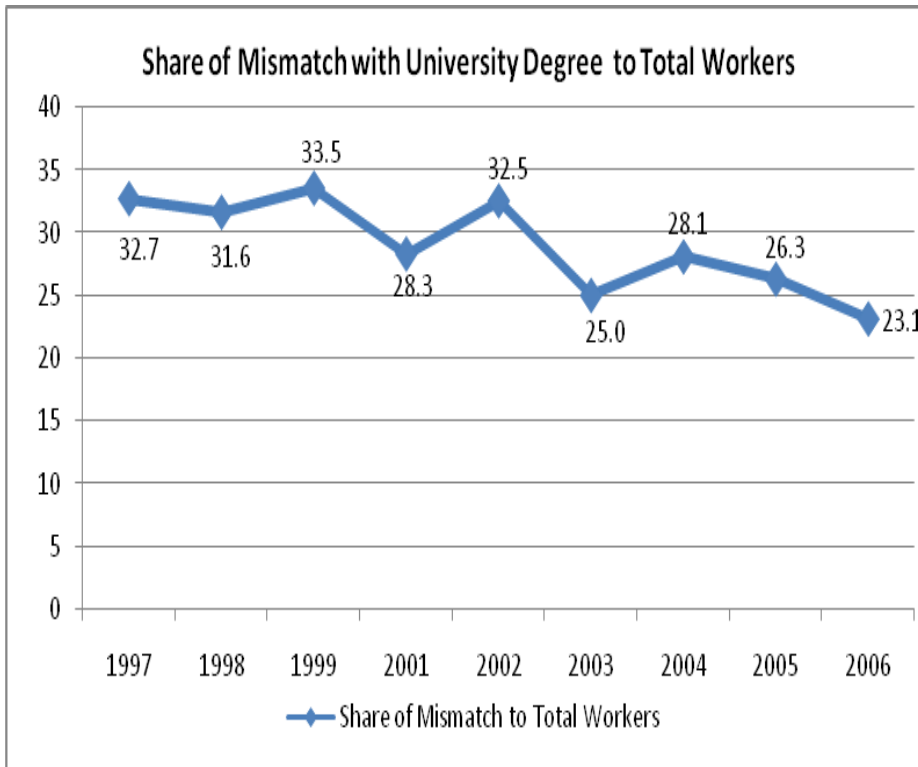
**Average Wage by Major 2009
(20-29 years old)**



Source: Sakernas (2009)



Mismatches are declining, and they are not always bad



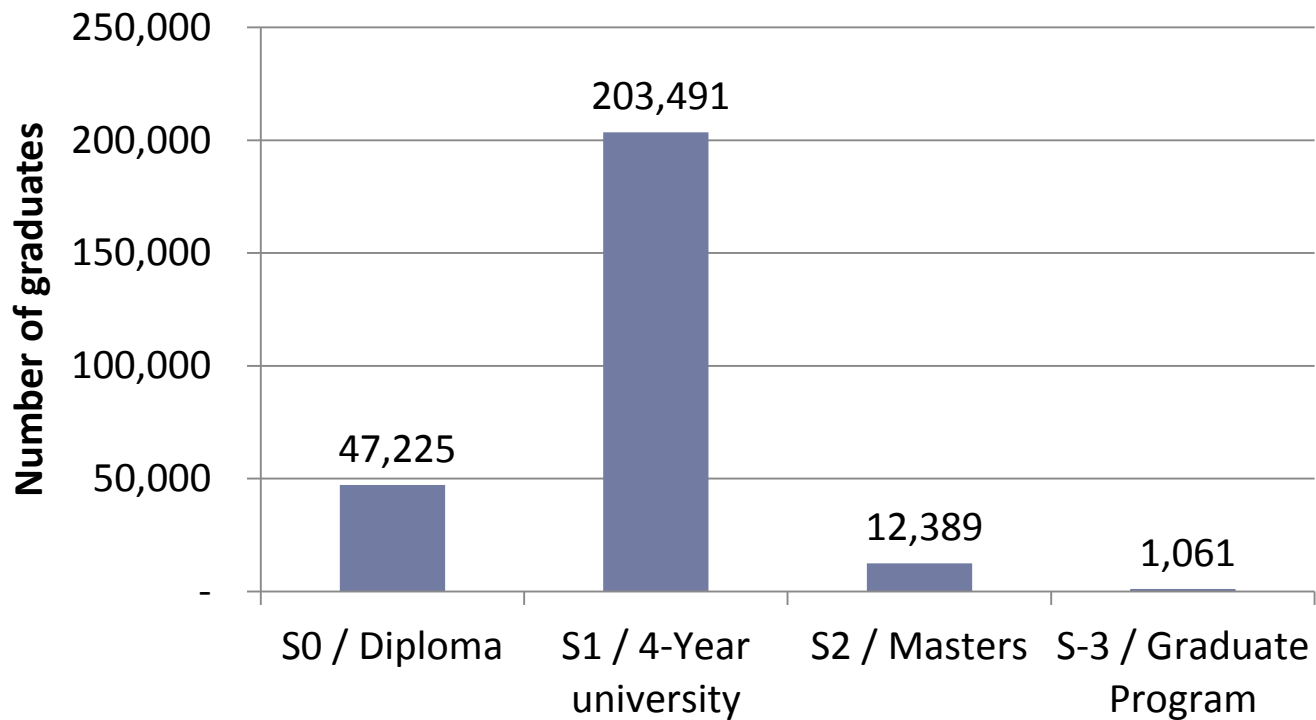
Source: Alisjahbana, 2008, using Sakernas

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Beyond S1, the system is still very small



Source: MoNE (2009)



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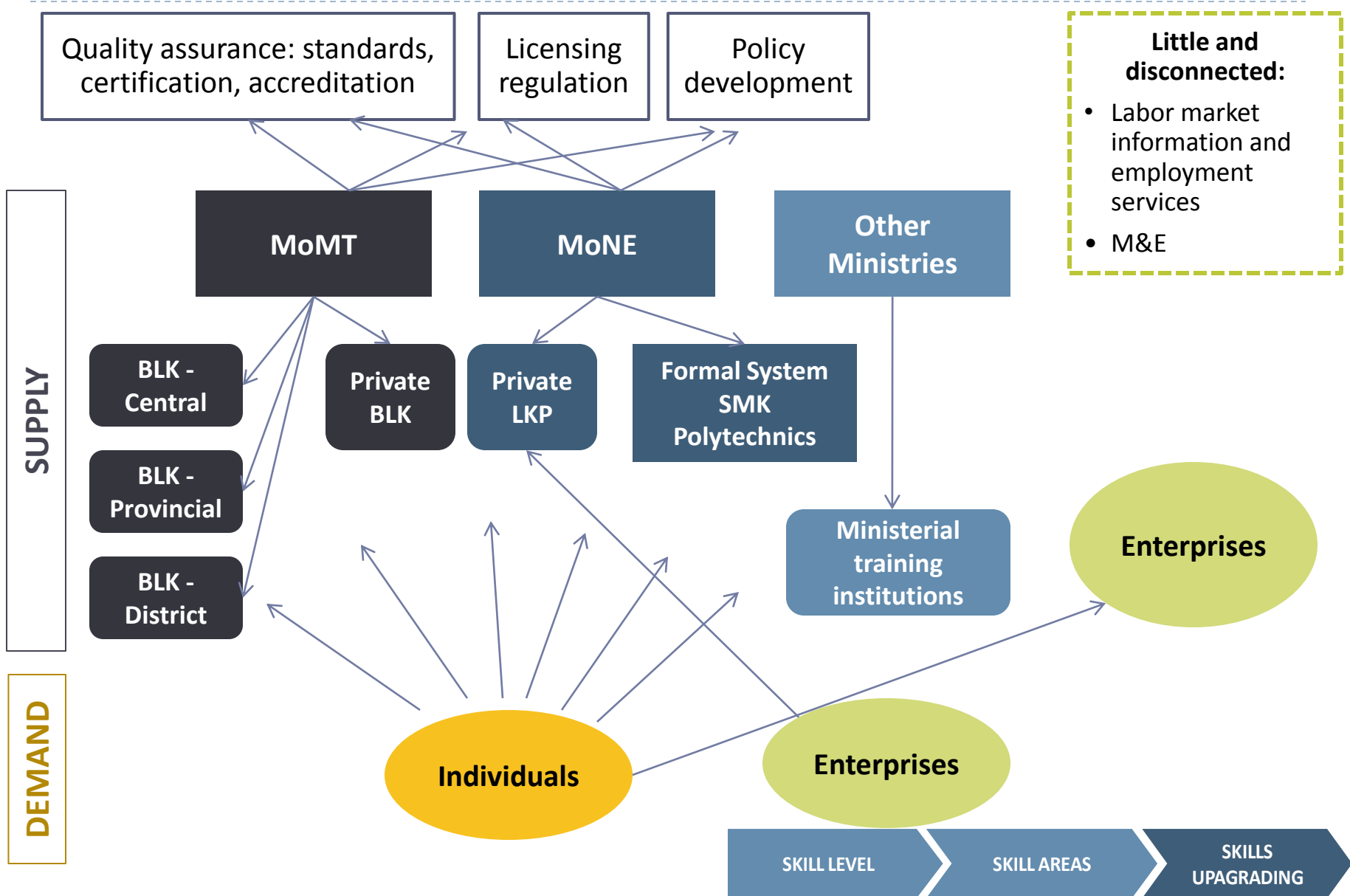
Provide skills in the right areas

- ✓ Improve basic skills
- ✓ Improve relevance of SMK and quality
 - technical and agricultural options
- ✓ Non-formal training supply does not match priority areas
- ✓ Higher education is biased towards the social sciences

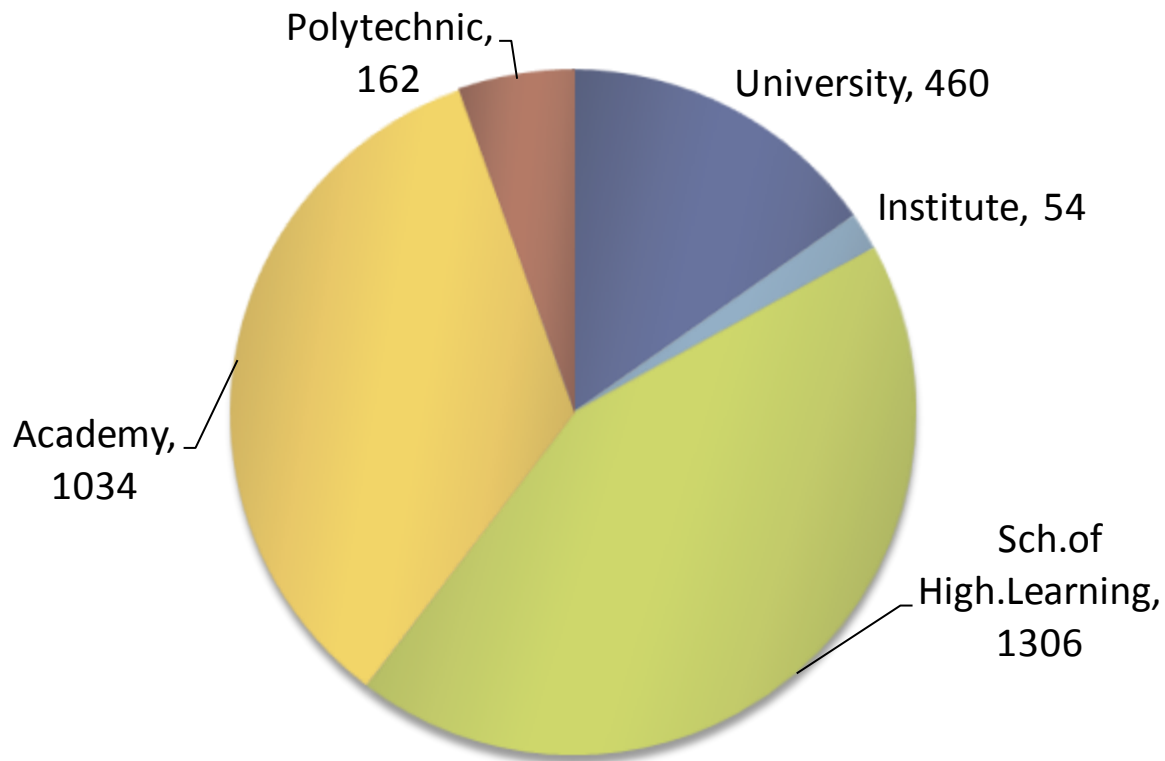
Facilitate skills upgrading

- ✓ Provide opportunities for skills upgrading:
 - TVET
 - Polytechnics
 - Graduate Education

Training System is inefficient but functioning



Polytechnics are still a small part of the picture



Source: MoNE (2010)

SKILL LEVEL

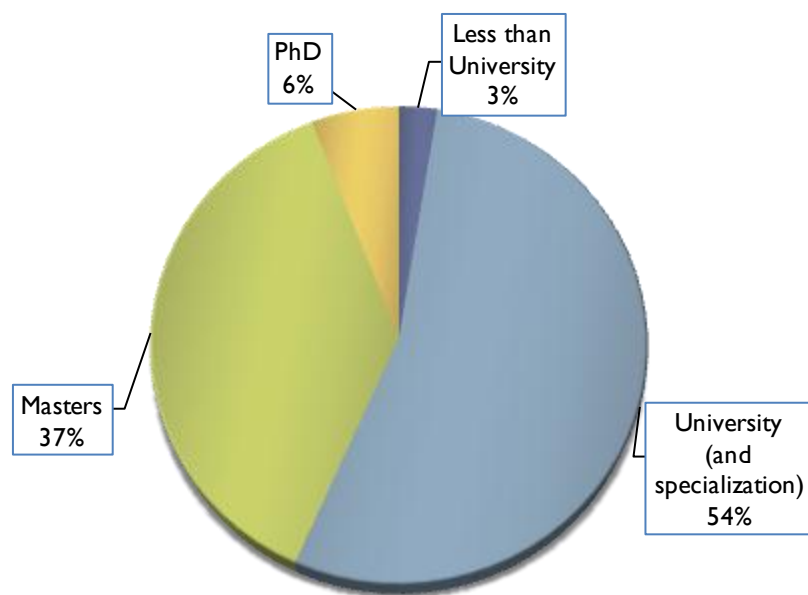
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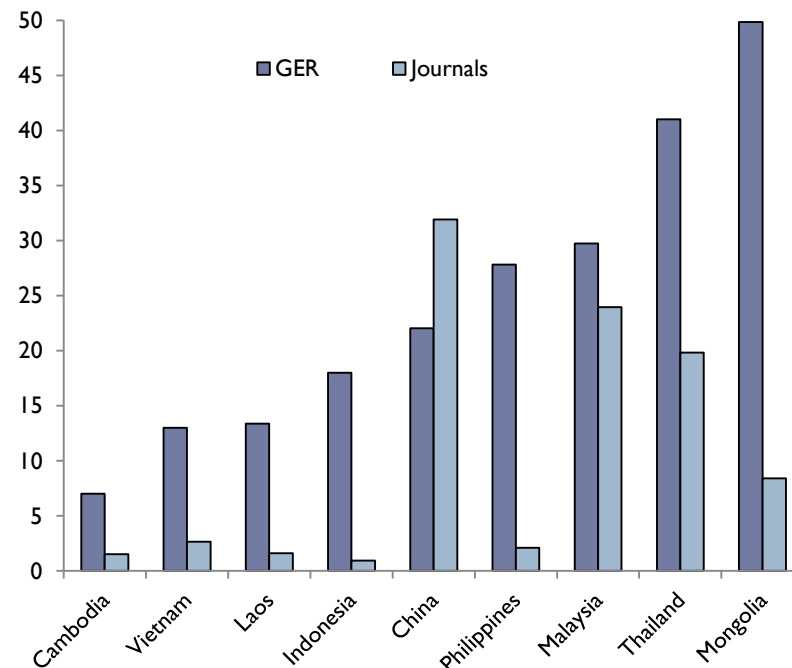
Upgrading High-Level Skills is the big problem

- Supply of graduate programs is very low
- Quality of universities is low (in international comparisons)
- Research capacity in the country is very low

Education Level of University Professors, 2008/09



Source: MoNE 2009



Note: Journal articles published per million people.

Source: UNESCO Institute for Statistics 2009

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Facilitate skills
upgrading

- ✓ Training system needs to be reformed
- ✓ Polytechnics needs to be developed
- ✓ Very few opportunities for advanced human capital
- ✓ **Scholarships**

Thank you!

For more information:

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