Where are the women?
Global gender gaps in technology and innovation

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National Assessments on Gender and STI

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women in global science & technology

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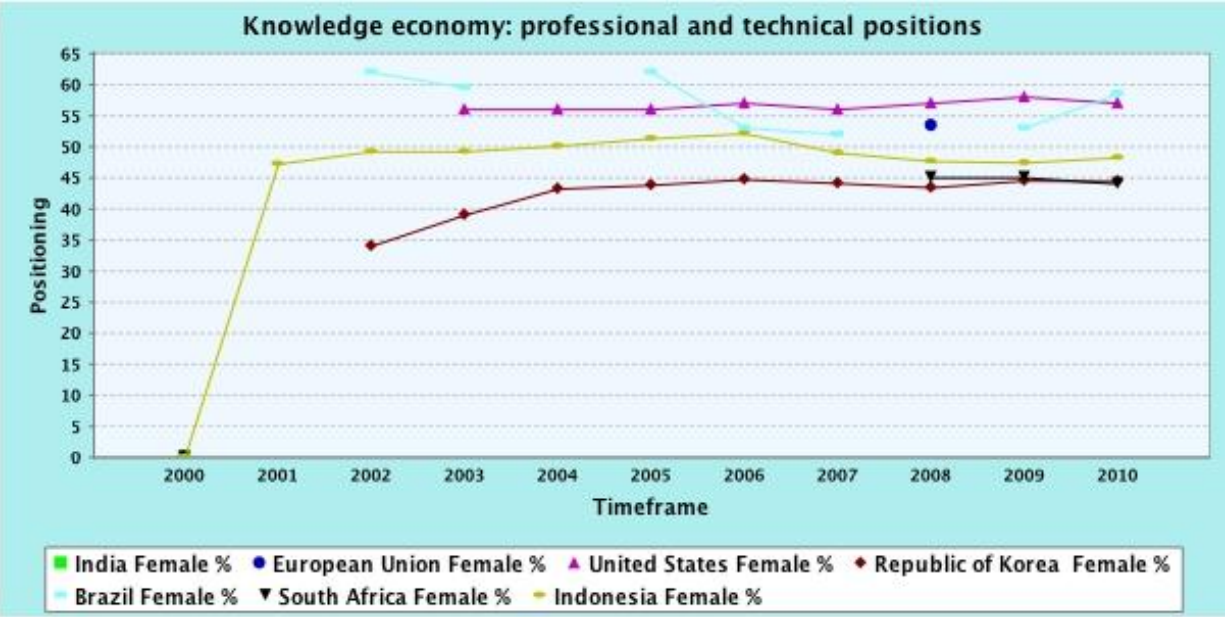
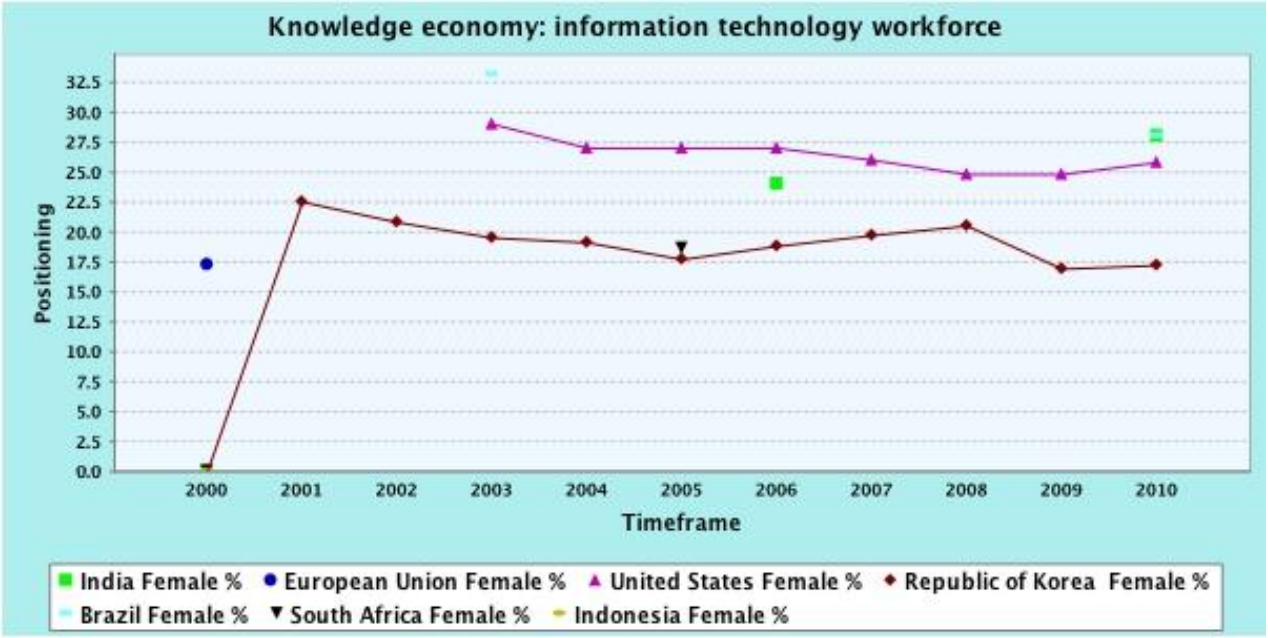
Overall Findings

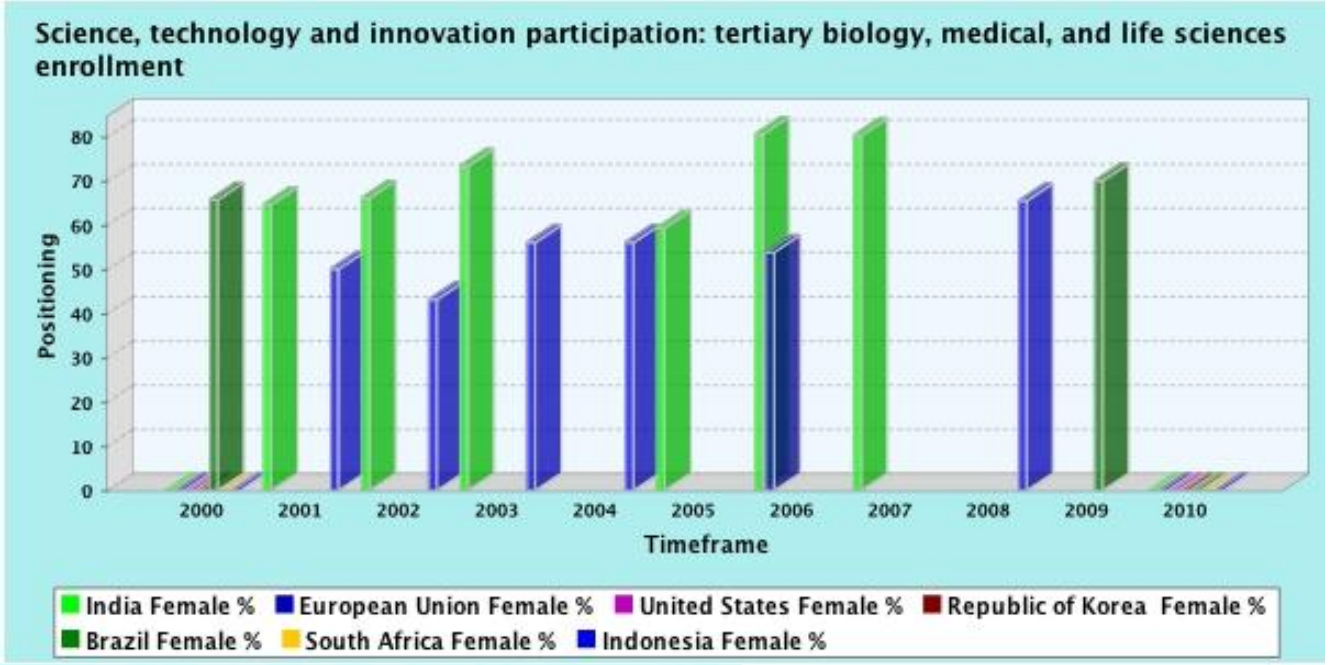
- The gender knowledge divide exists and flourishes in all countries, even those with a highly-developed knowledge economy
- Gendered barriers to participation in STI and technology exist -> this situation will not improve automatically with GDP, increased education or increased internet availability.

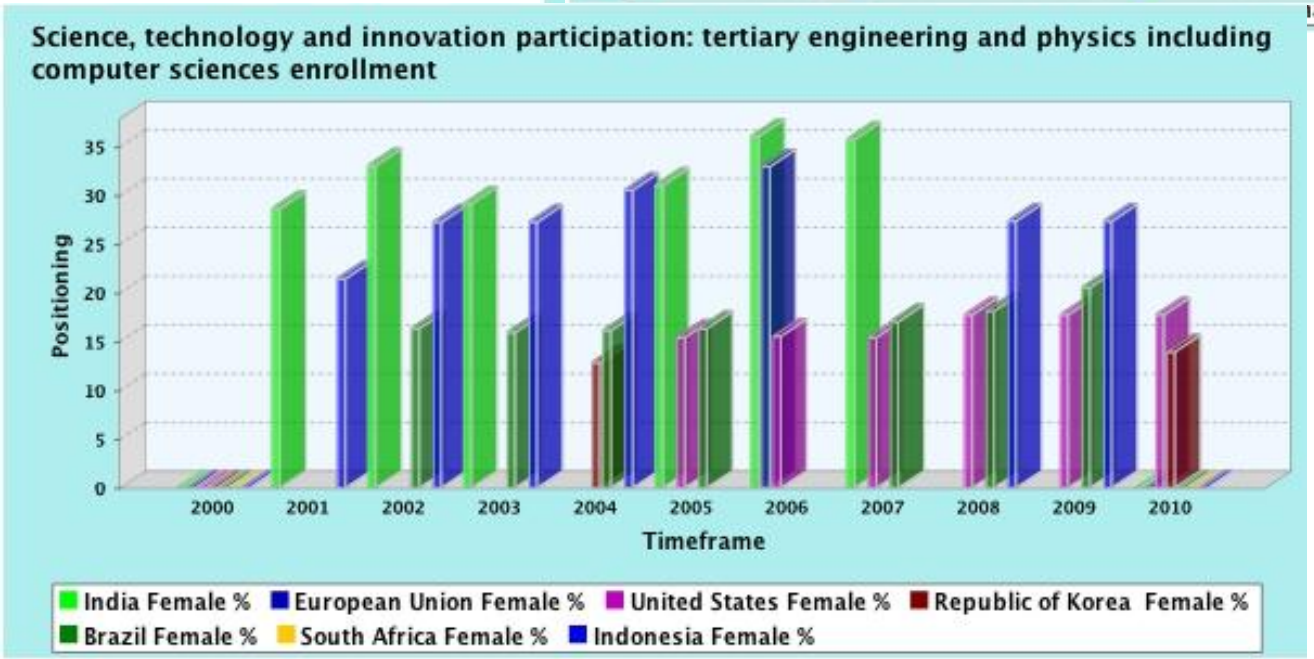
Knowledge economy



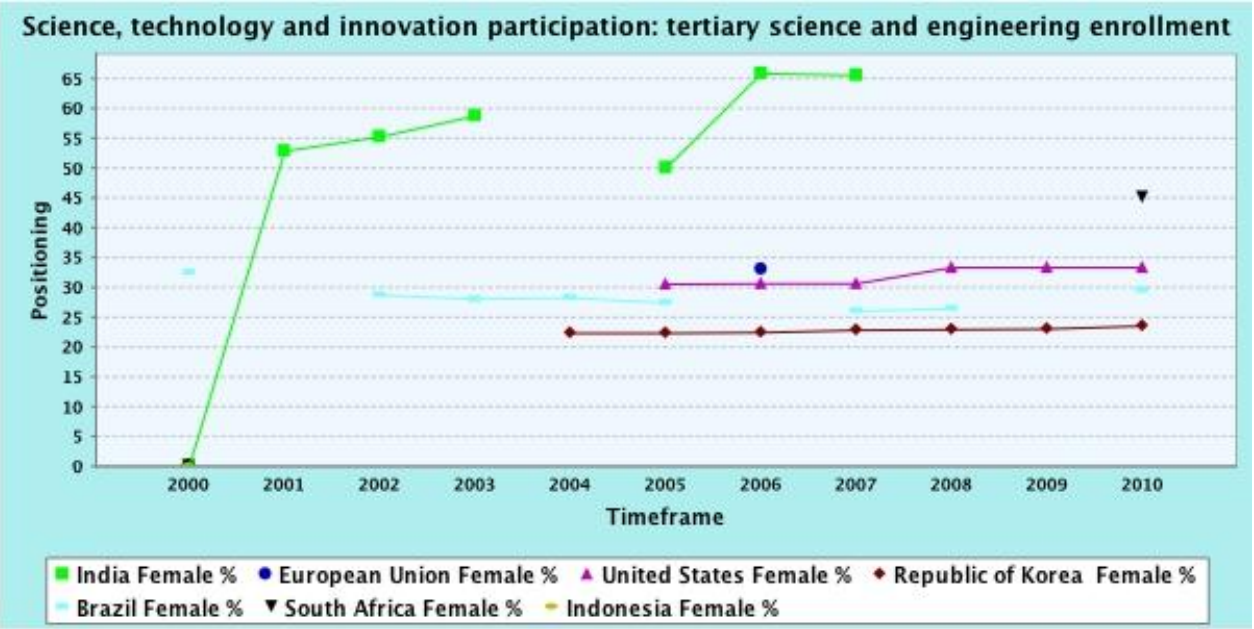


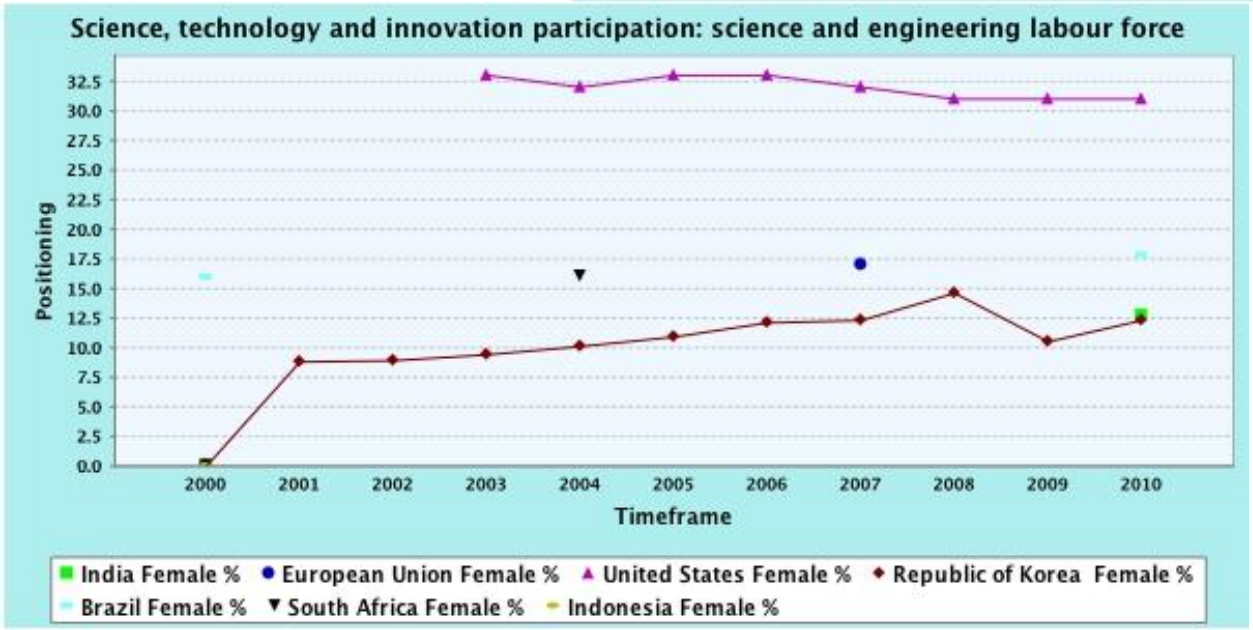
STI participation





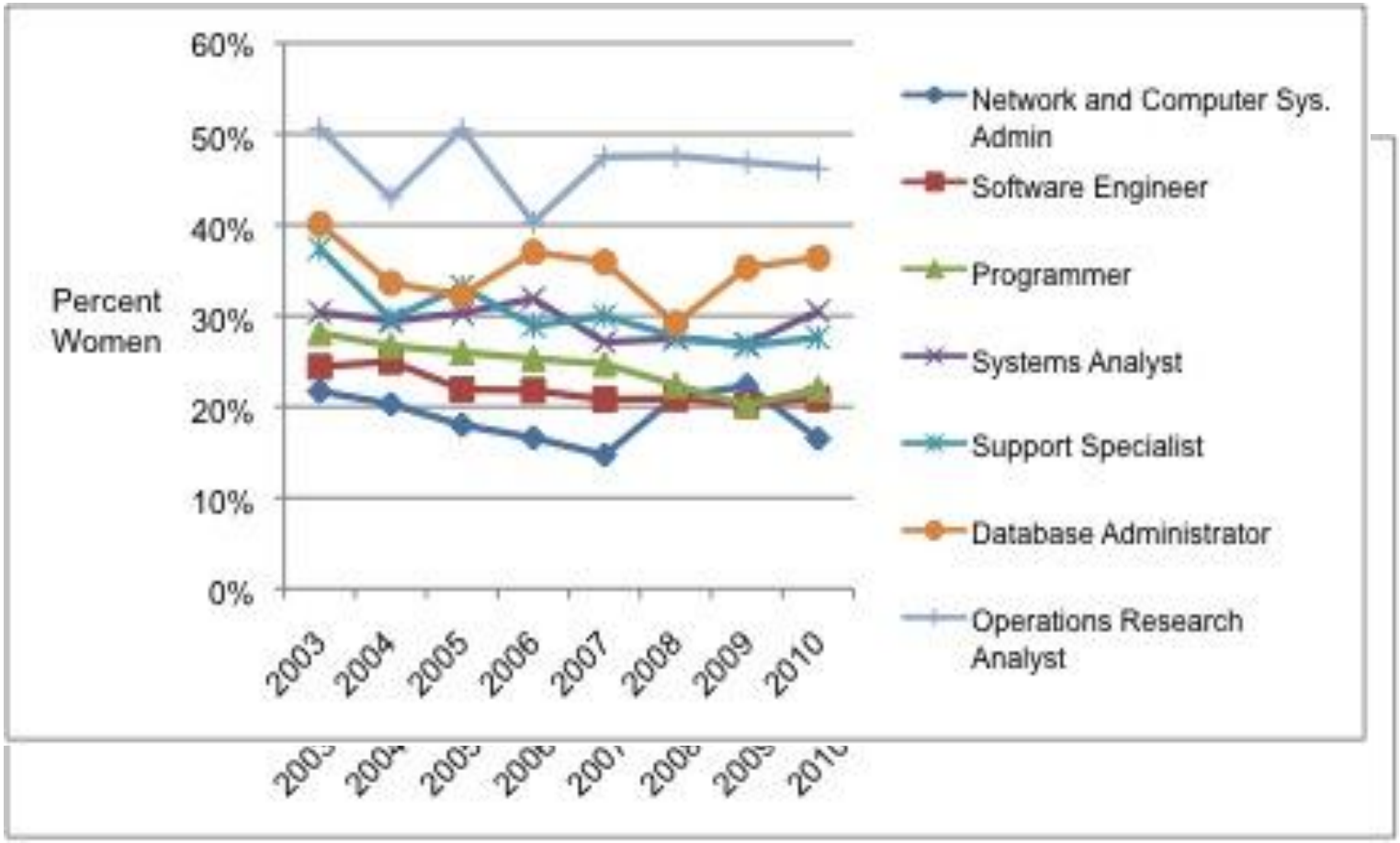
Enrolments vs Workforce



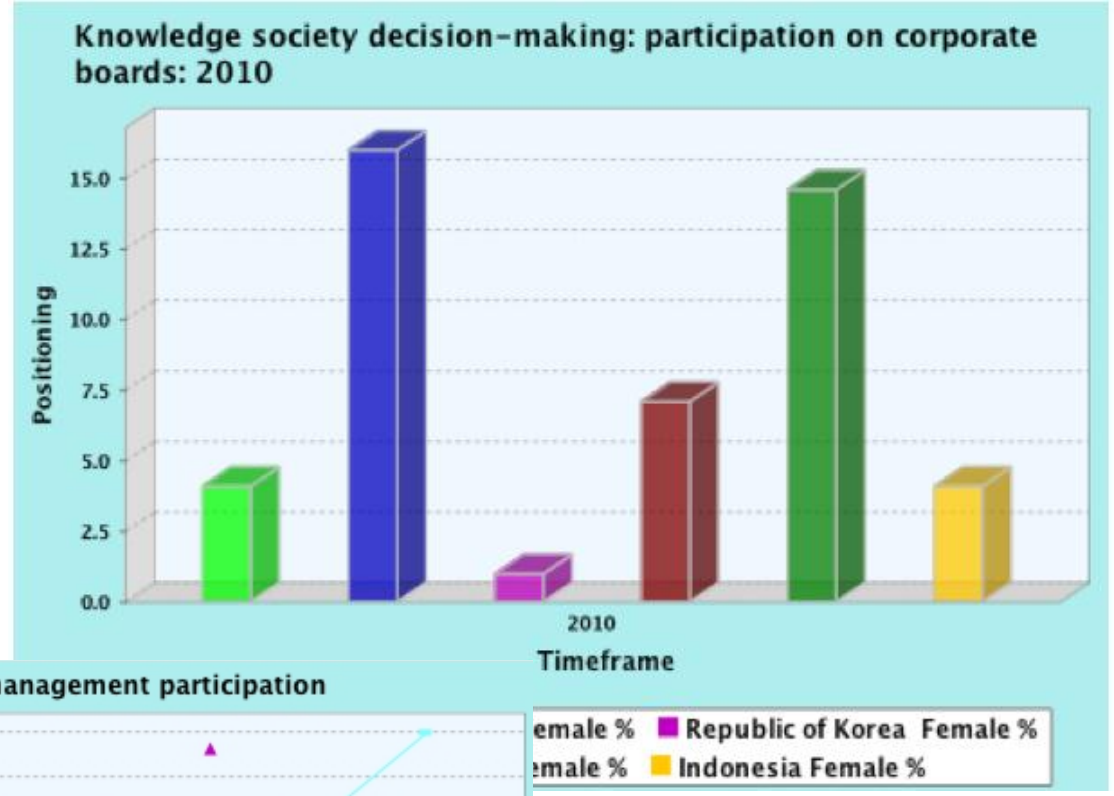


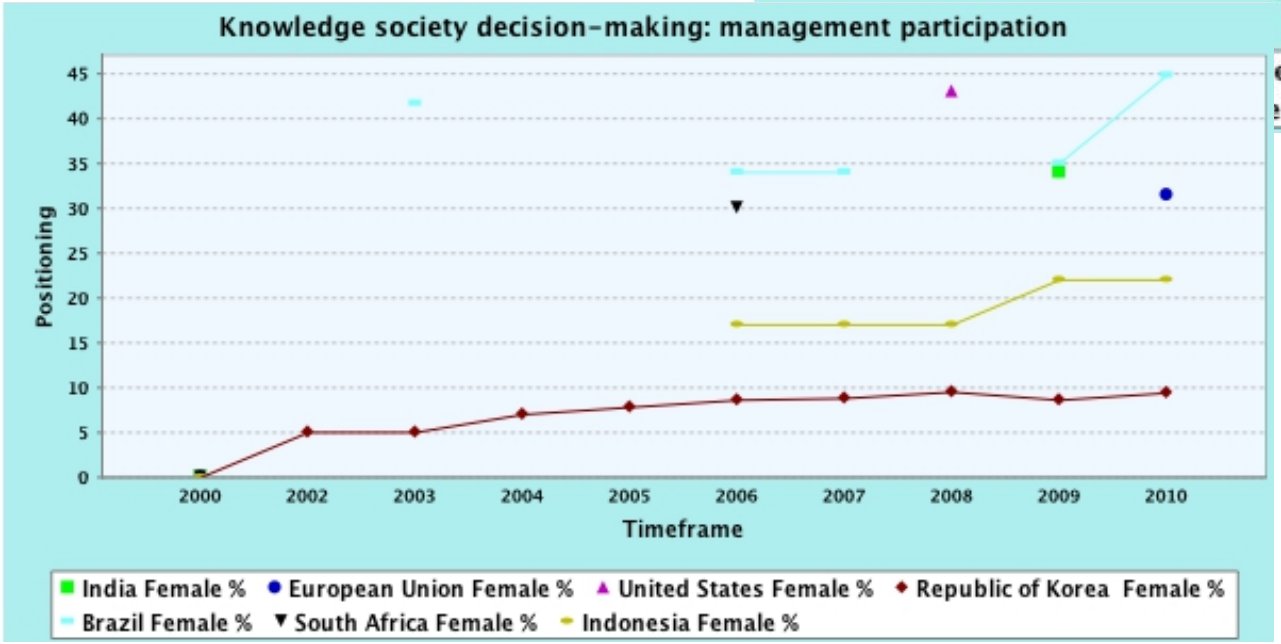
Declines in some sectors

Women in selected fields requiring high-level computer skills

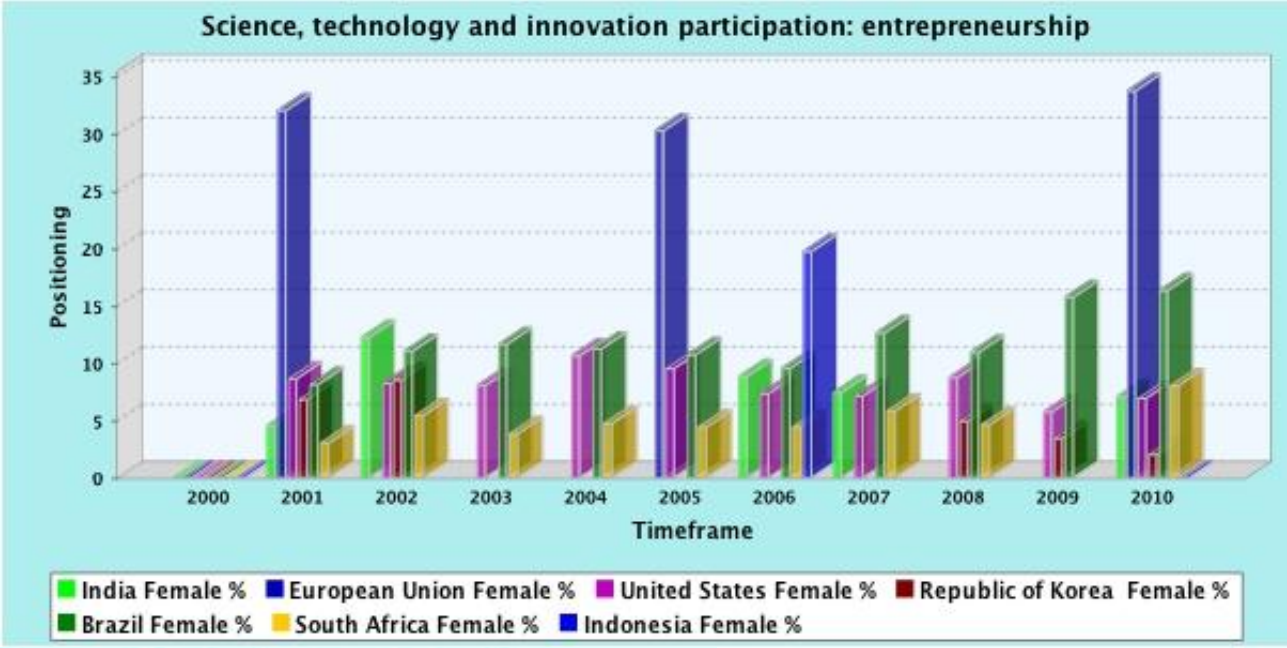


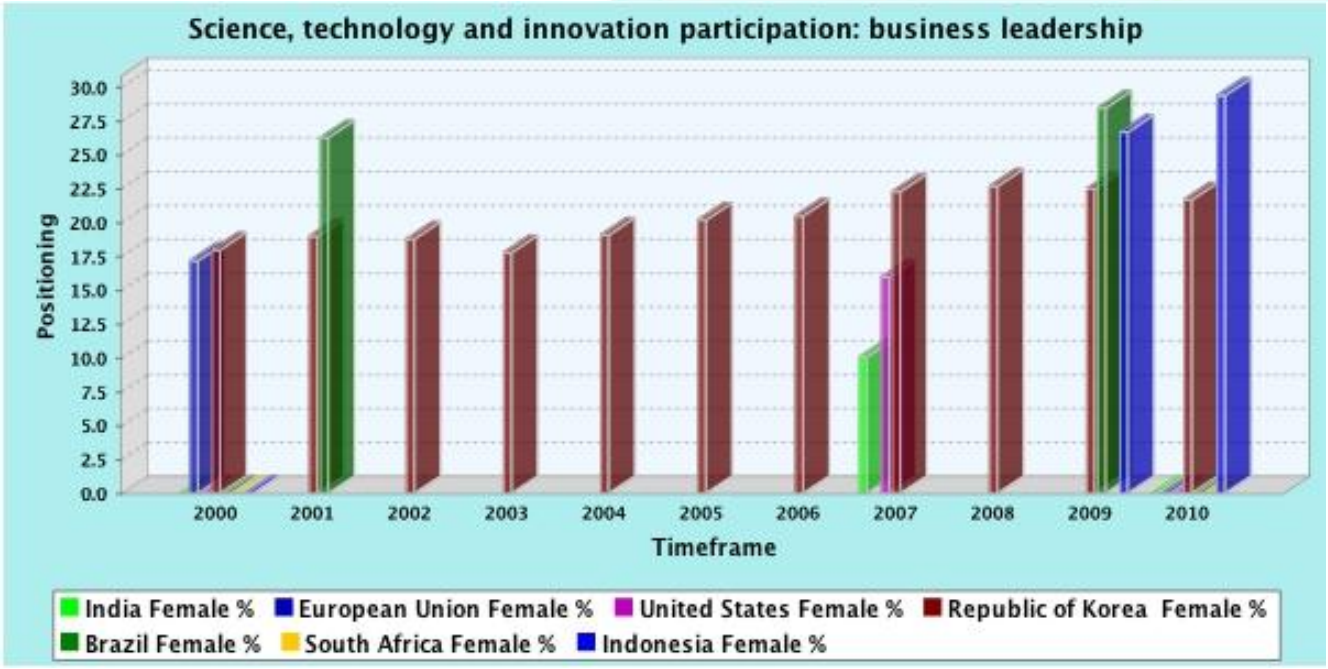
Knowledge Economy Decision Making





STI participation





What are the main findings?

- Approximate parity in some countries in S&E overall -> surprising results for some advanced countries
- Under-representation in engineering, physics and computer science — lower than 30%, South Korea 11%
- Declining representation of females in the IT and STEM labourforce in most countries
- Low representation in STI decision making and entrepreneurship

Why is this happening?

- Unfriendly work environment and expectations for women
- Social attitudes
- Control over resources
- Work-life balance
- Cultural restrictions with respect to safety and mobility

Country Profile: South Korea

Rank	6th
Overall comments	A surprising under-representation in STI and other sectors of the economy, despite policy efforts. A supporting policy environment but low presence in the economy or STEM education
Knowledge economy Decision making	17% of ministers, 9.4% of women legislators and senior officials and managers – increasing since 2004. 3.5% of chief executives and senior government officials.
Private sector	1% female representation on boards of major companies – one of the world's lowest
Knowledge economy	Low participation: fewer than 10% of engineering professionals and one-eighth of those in working in ICT – and decreasing.
STI enrolment & workforce	44% of enrolments in natural sciences. In professional engineering jobs, women make up 11.3%, compared to 31.4% in scientific professions leading to 12.3 % in overall science and engineering workforce.
Entrepreneurship	Under 5% of businesses are run by women
Education	Parity in lower levels, 2:3 gap in tertiary
Access to resources	No legal barriers, but trend is for male ownership Close to equal use of mobiles and internet.

Country Profile: Brazil

Rank	3 (after US and Europe)
Overall comments	Solid supporting policy + implementation
Access to resources	Equal access to property, infrastructure, ICT
Education	Parity at primary levels, majority at secondary and tertiary levels; financial support at tertiary level and above
KS Decision making	Less than 5 % ministers at national and state levels low, but increasing somewhat - 8% at state level (201), 26% at national level after Rousseff took office (2011)
Private sector	President-CEO (21.4%), Vice President (17.5%) and Director (26.3%) in 2008-9
Knowledge economy	44.8% legislators, senior officials and managers, 55% of technicians and associate professionals at 55%. IT workers is low: 13.7%, but over 60% of "biotechnology professional", "Information professional", and "support technician"
STI enrolment & workforce	58% in health and biological (62%) sciences; 47% in agricultural sciences; 33% in engineering and 37.5% in "exact" sciences – some rates are increasing -> drops in the workforce
Entrepreneurship	17% of new enterprises, 29% of businesses employing more than one person.

There is no simple solution

- "Getting women into science" is inadequate
- A multi-dimensional approach is required
- Good policy – public and private
- Changes in the workplace – and in attitudes
- Critical influencing factors

Thank you!

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