Future of Work Initiative: Broader context for Thailand 4.0

Sameer Khatiwada, PhD

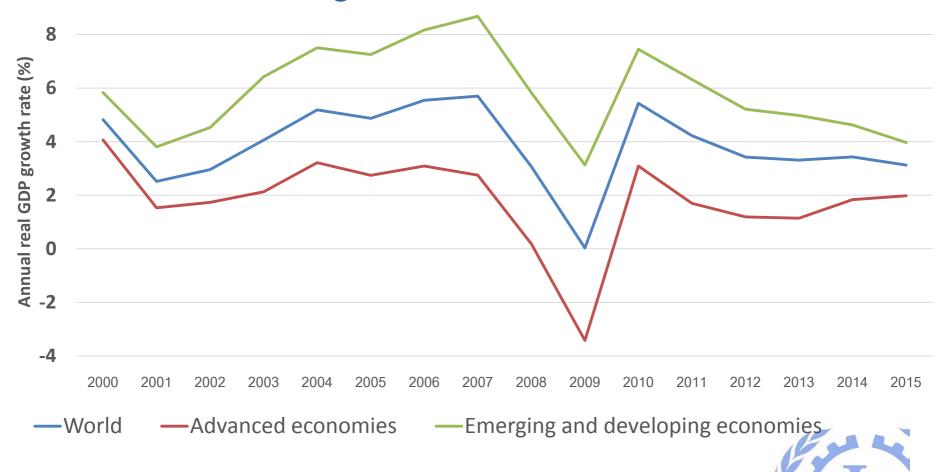
Employment Specialist Decent Work Team – Bangkok (RO-AP) International Labour Organization (ILO) 29 March, 2017



The future of Work centenary initiative

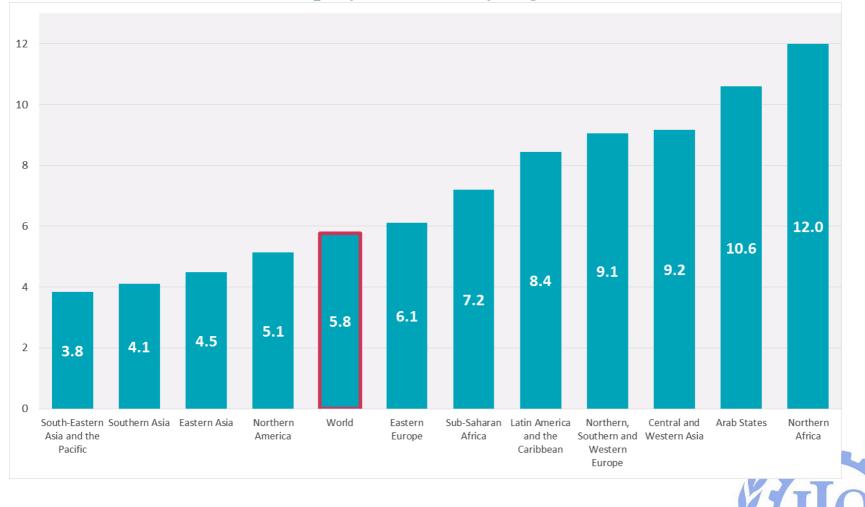
Megatrends in the World of Work: will sluggish growth generate enough jobs?

GDP growth from 2000 to 2015



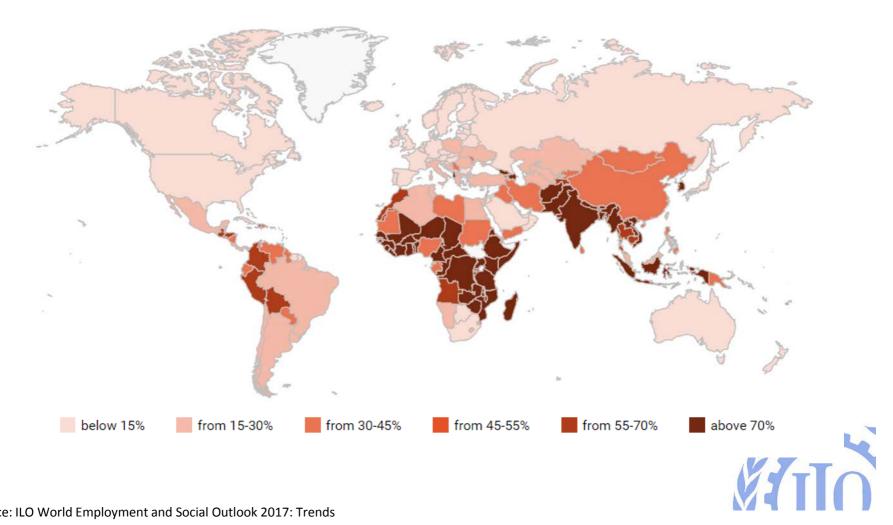
Megatrends in the World of Work: will sluggish growth generate enough jobs?

Unemployment rate by region, 2017



42% in Vulnerable employment

As a share of total employment, 2017



Young people are more likely to be unemployed than adults

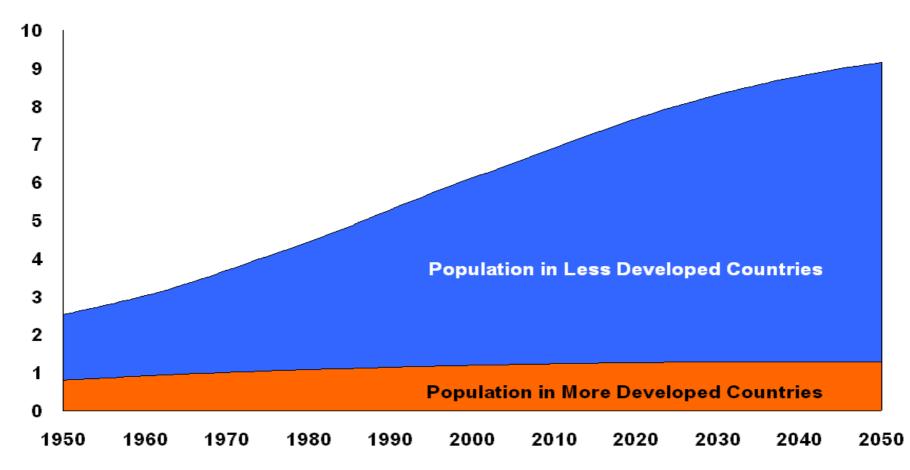
Youth to adult unemployment rate by region, 2007-16



Source: ILO calculations based on ILO Research Department's Trends Econometric Models, April 2016.

Megatrends in the World of Work: demographics and labour mobility

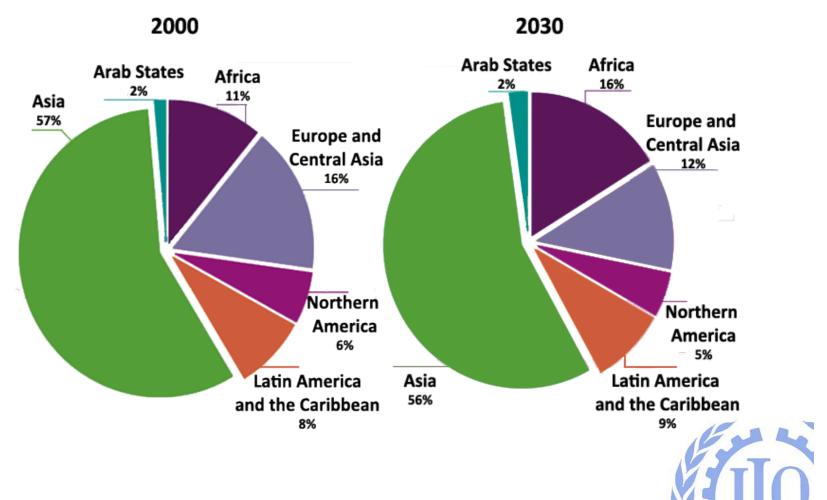
World population (in Billions): 1950-2050



Source: United Nations Population Division, World Population Prospects, The 2008 Revision.

Future of work \rightarrow future of Asia

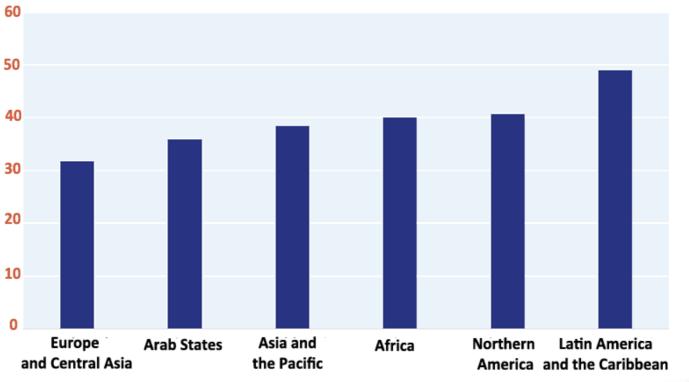
Share of global working-age population



Source: ILO calculations based on United Nations World Population prospects, the 2015 revision.

Megatrends in the World of Work: income inequality

Average Gini index by region, latest year available





Source: ILO based on All the Ginis database (version November 2014).

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Megatrends in the World of Work: creative disruption or total transformation?

The 4th industrial revolution is around the corner

1st Industrial Revolution

1760s-1900 Use of steam and mechanically driven production facilities 2nd Industrial Revolution

1900-1970s Electric Power driven mass production based on division of labor 3rd Industrial Revolution

1970s to date Extensive use of Controls, IT and Electronics for an automated and high productivity environment 4th Industrial Revolution

Future Smart: based on integration of virtual and physical production systems

Source: DFKI

Industry 4.0: Is this any different than the ones that came before?

50 MILLION USERS CONSUMPTION SPREADS FASTER TODAY 75 PERCENT OF U.S. HOUSEHOLDS 100% ----STOV 80 COLOR TV REFRIGERATOR ELECTRICITY 38 60 COMPUTER CLOTHES WASHER AIR CONDI-TIONING 40 13 35 DAYS CLOTHES DRYER TELEPHONE VCR DISH-INTERNET RADIC WASHER 3.5 20 MICROWAVE CELLPHONE Telephone Faceboot AneryBirds Internet Radio UTO ~ 1900 1915 1930 1945 1960 1975 1990 2005

Source: Michael Felton, The New York Times.

ETT

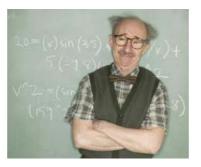
YEARS TAKEN TO REACH

Jobs at risk: medium and low-skills

Routine, medium-skill occupations now <u>compete</u> with computers Abstract, high-skill occupations have <u>benefited</u> from computers

Repetitive, low-skill jobs now being <u>automated for the</u> <u>first time</u>

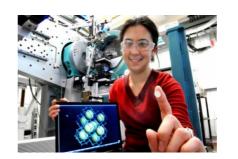


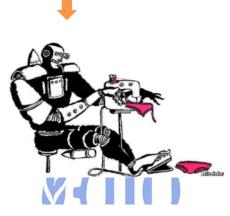












Jobs at risk in Thailand

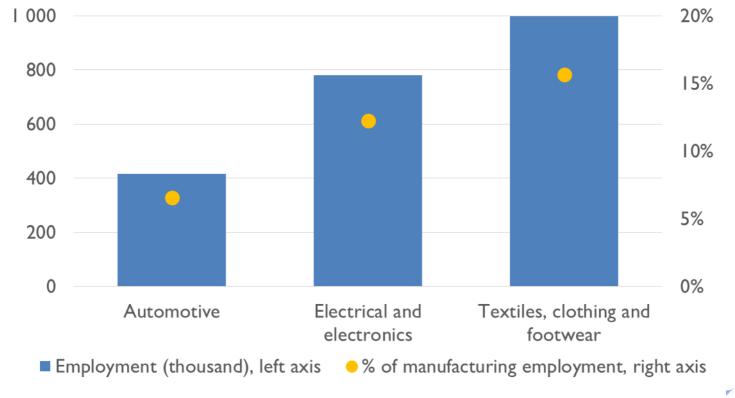
Employment shares by skills (%), 1995-2016

	Low skills- Male and female		Medium skills- Male and female		High skills- Male and female	
High income	1995	2016	1995	2016	1995	2016
Brunei						
Darussalam	26.7	13.9	50.2	45.1	23.1	41
Taiwan, China	21.5	24.9	53.4	41.2	25.1	33.8
Hong Kong,						
China	17.1	20	56	41.8	26.9	38.2
Japan	6.8	6.8	75.1	68.1	18.1	25
Korea, Republic						
of	11.2	12.9	72.4	65.3	16.4	21.8
Singapore	6.4	7.5	54.7	37.6	38.9	54.9
Middle and low						
income	1995	2016	1995	2016	1995	2016
Thailand	10.6	10	76.6	76	12.8	14
Philippines	28.8	32.1	56.1	43.7	15.1	24.2
Viet Nam	69.8	40.3	24.9	49	5.3	10.7
Cambodia	4.3	17.3	91	78.8	4.6	4
Myanmar	31.4	30.7	64.8	62.8	3.9	6.6
Lao	1.2	1.1	94.2	93.4	4.5	5.4
Indonesia	17.3	16.3	76.3	73.5	6.3	10.2
Malaysia	10.7	12.7	67	61.4	22.2	25.9
WESO 2016, ILO.						

Source: WESO 2016, ILO.

Manufacturing employment \rightarrow decent work

Total employment in automotive and auto parts, E&E and TCF (thousand) and share of total manufacturing employment (per cent), Thailand, 2015

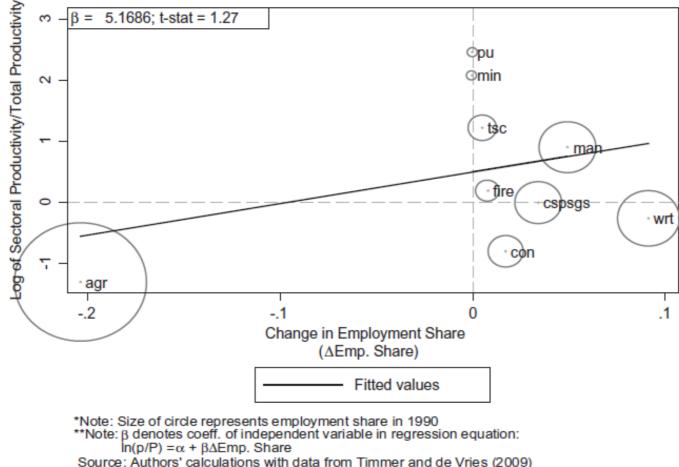




Source: Adapted from ILO: ASEAN in transformation: How technology is changing jobs and enterprises, op. cit.

Structural transformation in Thailand: agriculture → manufacturing

Correlation between sectoral productivity and change in employment shares in Thailand, 1990-2005





Source: McMillan, Rodrik and Verduzco-Gallo, 2014.

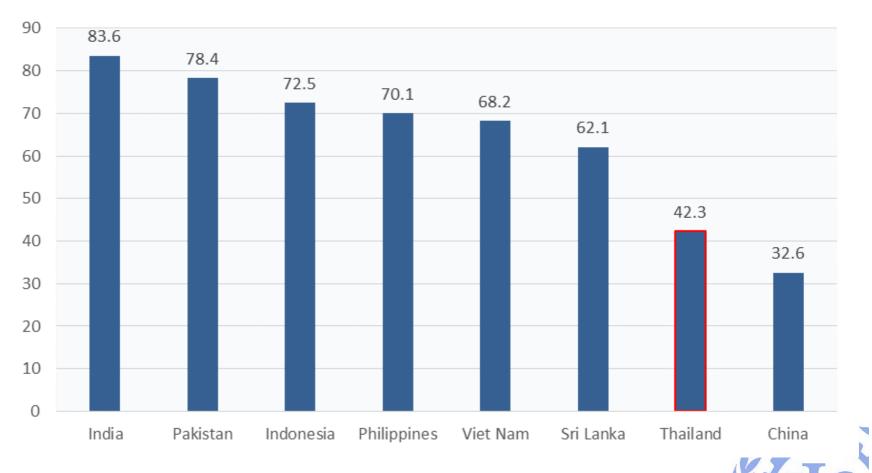
Key findings: ASEAN Report

- In the next two decades, 44 per cent of jobs in Thailand are at high risk of being automated
- Technology adoption in Thailand will impact → low-skilled workers, women, youth and less educated workers
- Automotive and E&E sectors → "cobots" will collaborate with skilled workers and improve workplace safety
- TCF sector → automated sewing machines → 80 per cent of workers are at high risk of automation (mostly women)



Informality in Thailand

Informal employment out of total non-agricultural employment, latest year available



The future of WOrk centenary initiative



Overarching goals

- Generate a shared understanding of the forces transforming the world of work
- Provide a **constructive global forum** for the exchange of ideas between the tripartite constituents
- Articulate and promote policy alternatives and good practices that can be replicated by governments and social partners





Three stages

- **2016/17** national tripartite Future of Work consultations
- 2017/18 establishment and work of Global High-Level Commission on the Future of Work
- 2019 Centenary celebrations and discussion of the report of the Commission – culminating in the International Labour Conference



Four Centenary Conversations

- Work and society
- Decent jobs for all
- The organization of work and production
- The governance of work



Strengthening our knowledge base in six areas

- 1. The changing employment relationship
- 2. Towards a **new social contract** or compact (incl. social dialogue, income distribution etc.)
- **3. Labour demand** (including the role of technology, productivity)
- **4.** Labour supply (including demographics, migration, unpaid work)
- 5. Access to rights and compliance
- 6. Role of macroeconomic policy, finance & investment

THANK YOU

The future of WOrk

centenary initiative

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