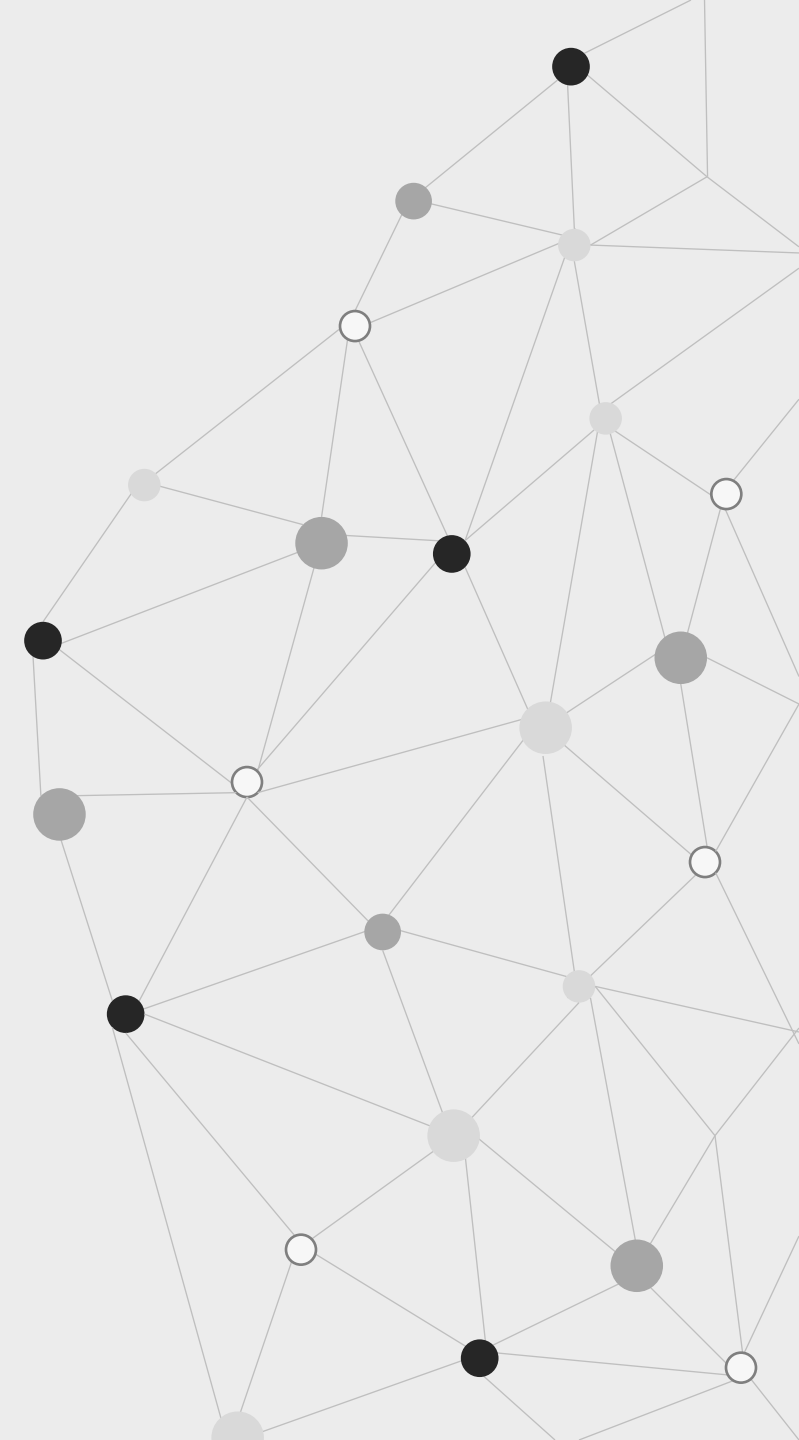
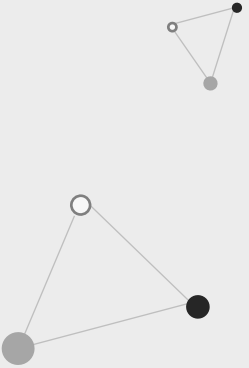


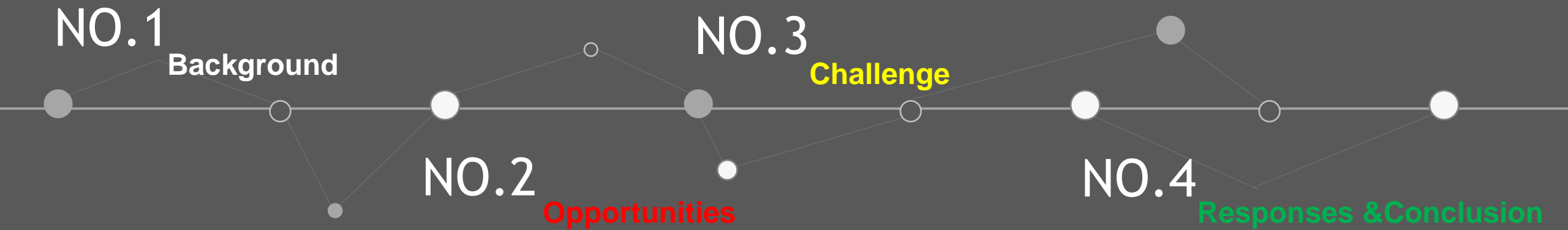
**Exponential technology change and
Automation :Opportunity and
Challenge for
Developing countries**

Mexico city,December 6-8,2016

ZHANG Chenggang

Tsinghua University





For Session 6:

- SESSION 6: POTENTIAL EFFECT ON EMPLOYMENT IN DEVELOPED AND DEVELOPING COUNTRIES



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challen
for
Developing countries

take China as an example

Challenges



Destabilize the social structure

The imbalance between the development of technology and the adjustment of social structure

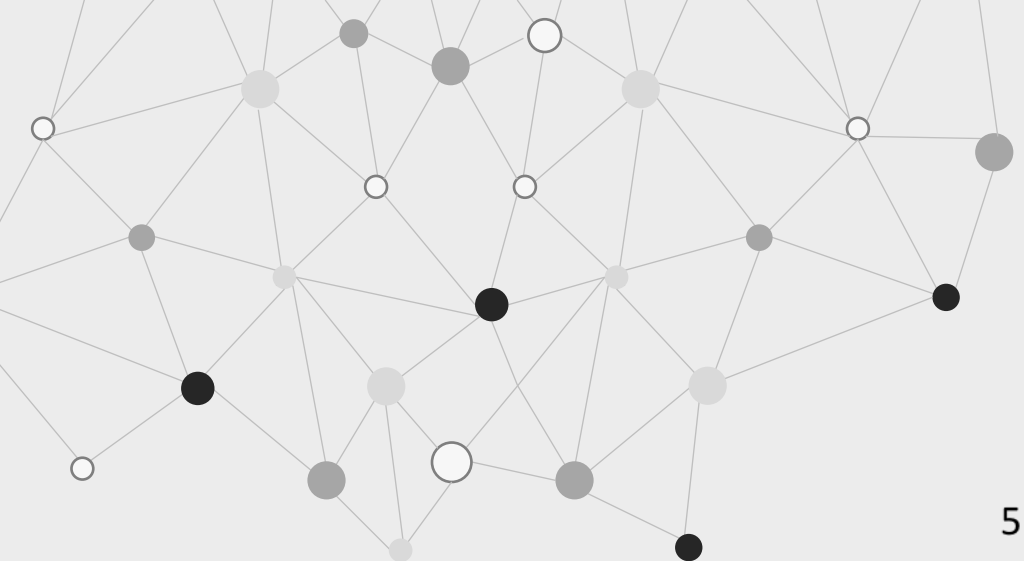


**Unemployment problem
Resulting in surplus labor diversion problem**



Resulting in new social gaps:

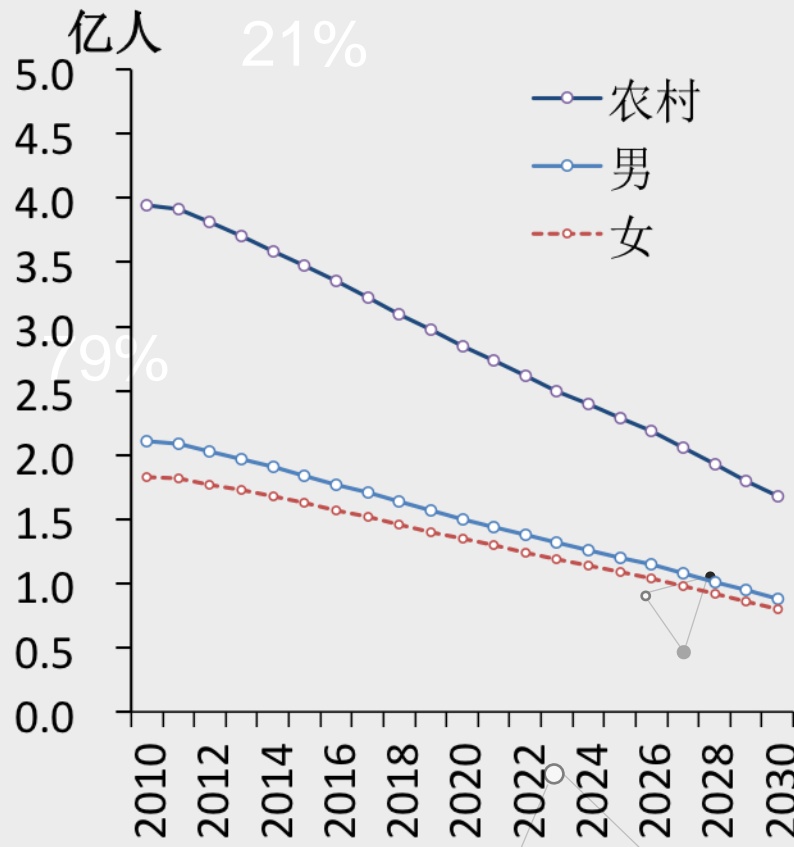
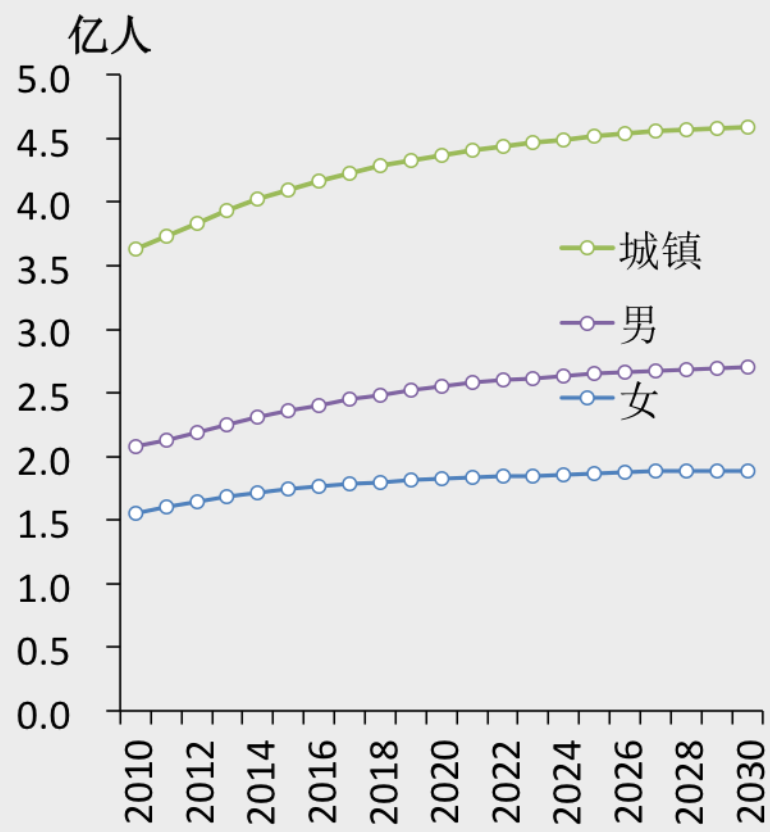
**The gap between enterprises;
The gap between regions.**



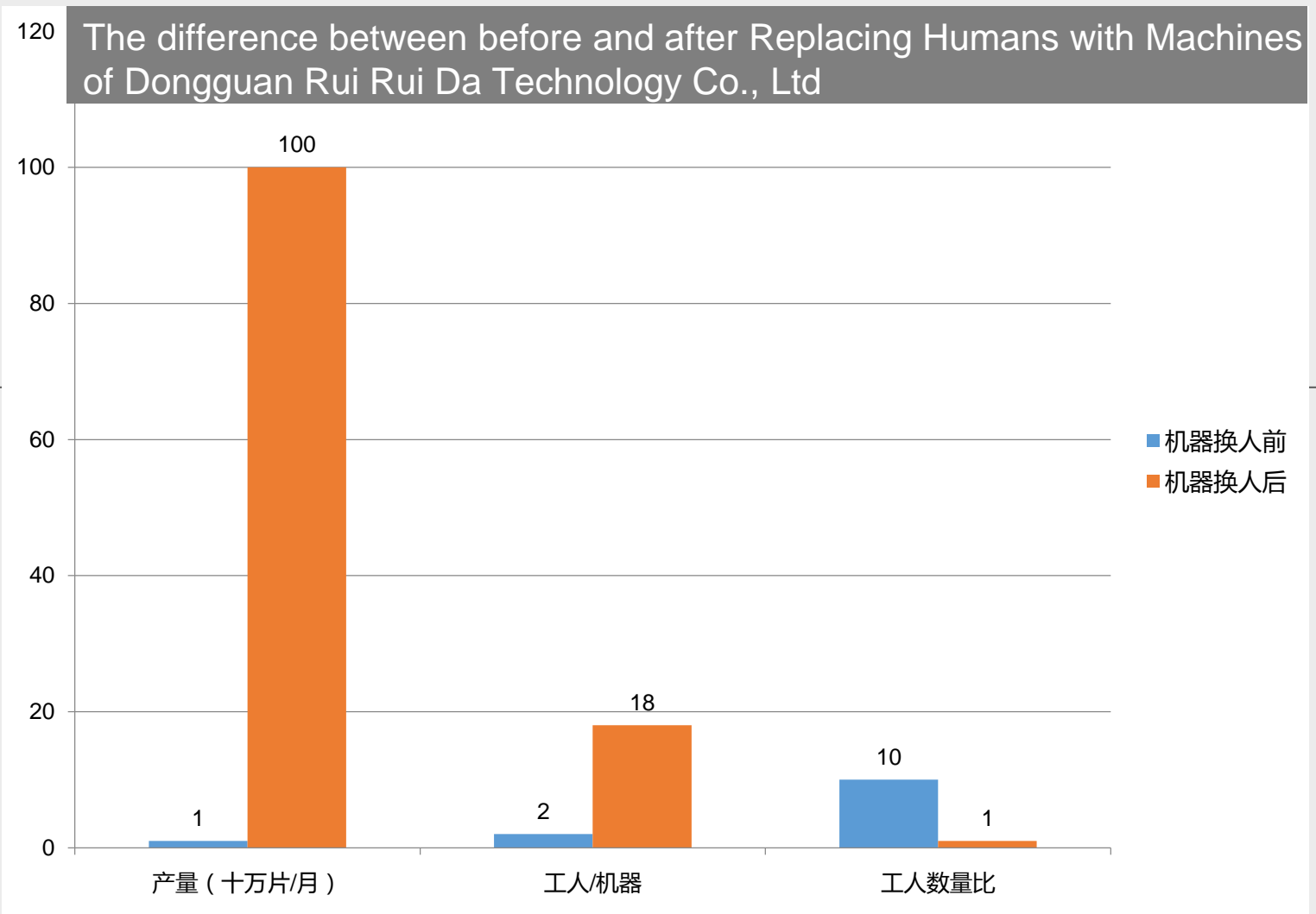
The trend of changes in labor force population in rural and urban areas from 2010-2030

Destabilize the social structure

If machines replace people, the employment of populations from rural to urban becomes a serious problem, and social structures will become unbalanced



Employment



Employment

The diversion of surplus labor has become a serious social problem

Some scholars have boldly predicted that the next 10 years, because of machine replacement and artificial intelligence development, at least **50%** of China's employment will **lost** their original job, and need **to re - employment training** to find a job again.

China's working-age population has **8-9 billion** (16-60 years), which means that **4-5 million** people will lose their jobs, and need training and employment.



● The gap between enterprises

Intelligent manufacturing is a capital and technology intensive projects, the cycle of investment and return is very long, almost only the world top 500 and large-scale manufacturing enterprises can really have a chance to do intelligence, how to let the small and medium-sized enterprises be into intelligent manufacturing rapidly become a pressing problem. This problem will also show that the gap between enterprises will be enlarged.



● The gap between regions

The more developed countries or regions, tend to the faster speed of technological diffusion. The backward countries or regions, often only used the mature technology, it must widen the gap with the developed countries.

THANKS

