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China's 12th Five-Year Plan:
Policy Implications
And Impact on Key Sectors

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Outline

1 Policy implications: rebalancing, restructuring and welfare

2 Impacts on key sectors and on innovation

Objectives

- The Plan has a number of key objectives (24 targets, half of which binding),
- Some are a continuation of the 11th FYP but many are new

- **Key objectives**

1. Rebalance the economy toward domestic consumption
   Away from external demand and investment

2. Refocus attention to “sustainable” growth versus “how much” growth
   Economic restructuring/industrial policy

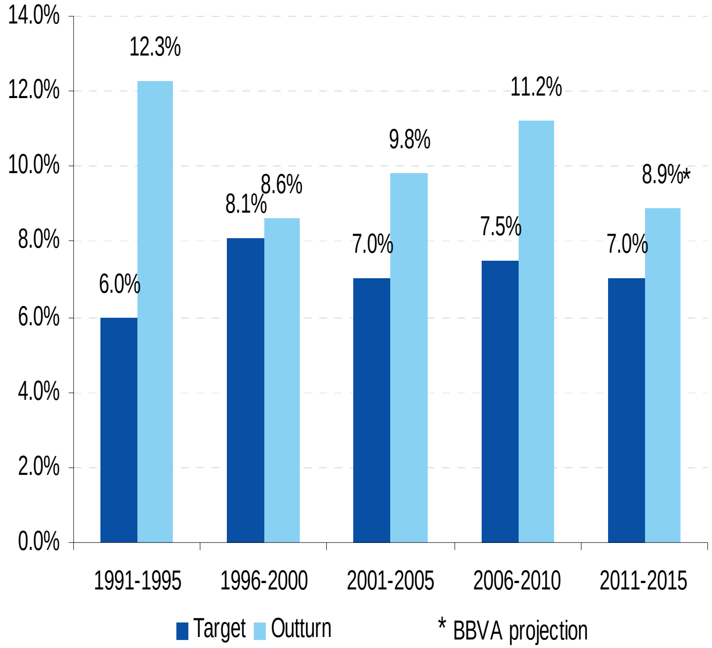
3. People’s welfare/harmonious society is key

A focus on sustainable growth

- The annual average GDP growth target over 2011-2015 is modestly lowered to 7%.
- We view the target as a floor. Our projects are 8-9%
- Conflict of interest between local and global targets

GDP growth targets and outturns

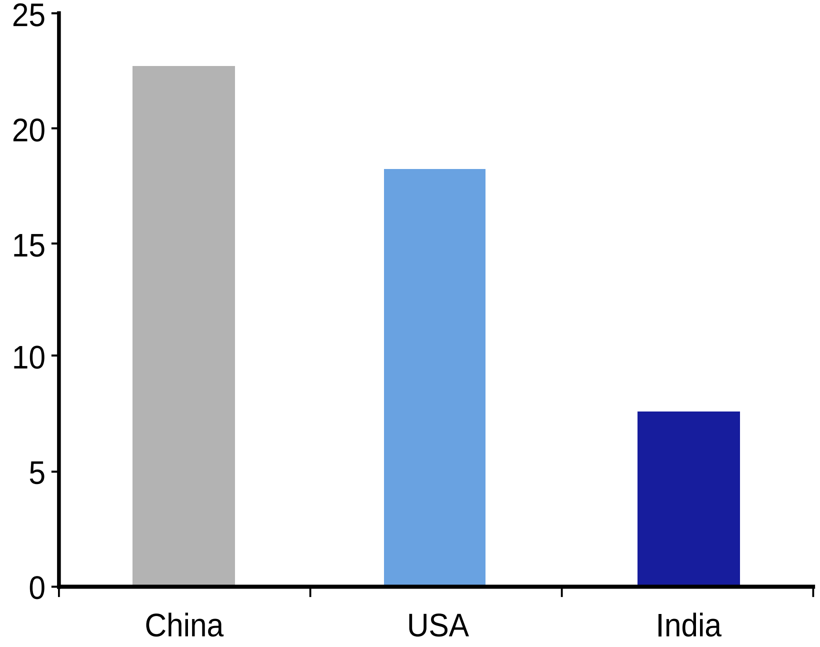
Source: CEIC & BBVA Research



Which will lead China to be the world largest economy well before 2020

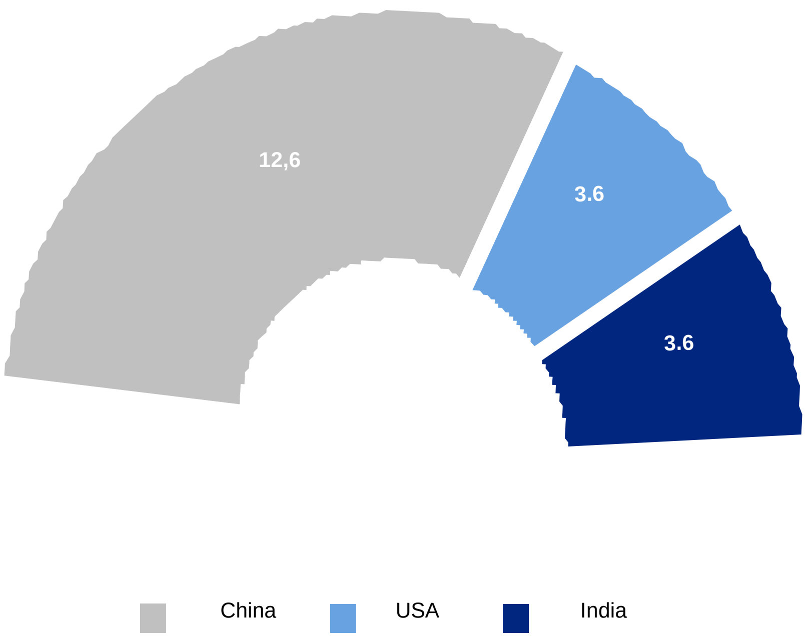
GDP adjusted by PPP: level in 2020 (trillions)

Source: BBVA Research and IMF



GDP adjusted by PPP: change in 2010-2020 (trillions)

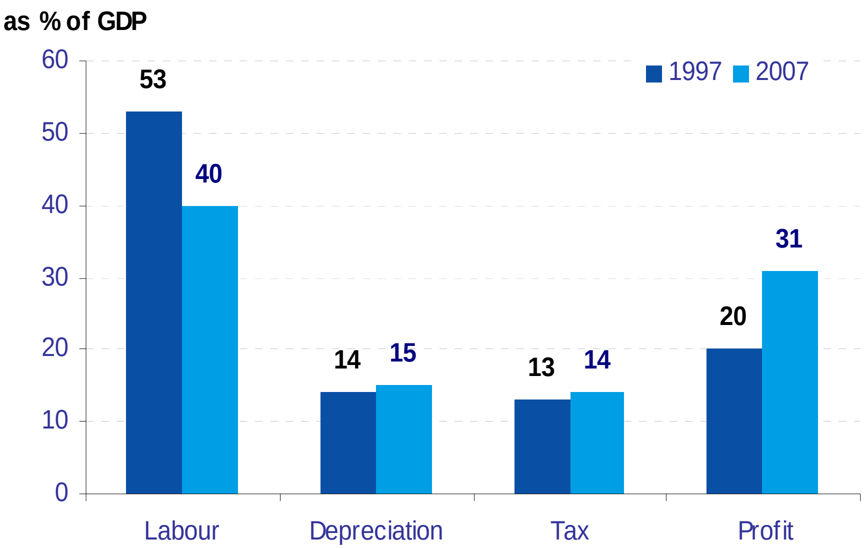
Source: BBVA Research and IMF



First objective: Rebalancing (1)

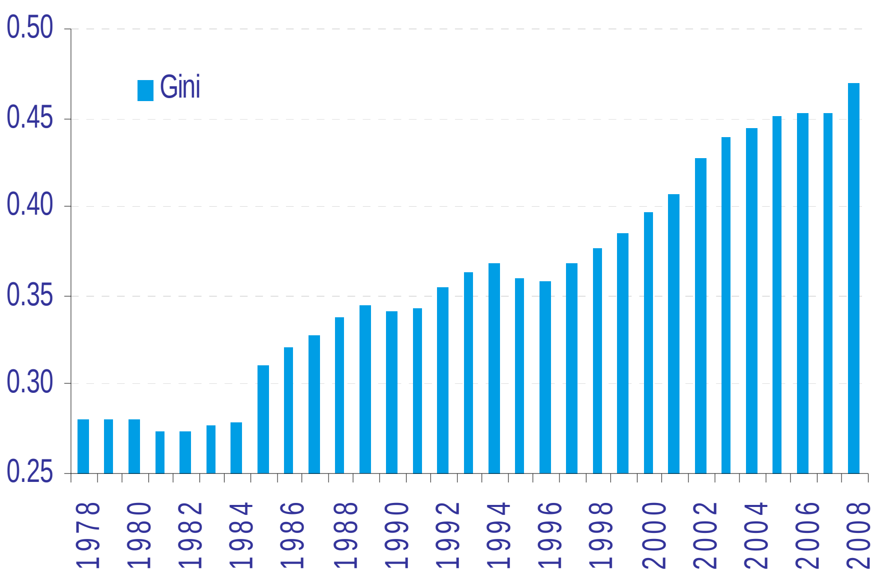
- The Plan upgraded boosting "domestic consumption" ahead of "investment" and "export" for the first time.
- The existing export-led growth model is believe to drive down the labor income and results in the widening of income gap.

The falling share of labour compensation in GDP



Source: CEIC , HSBC

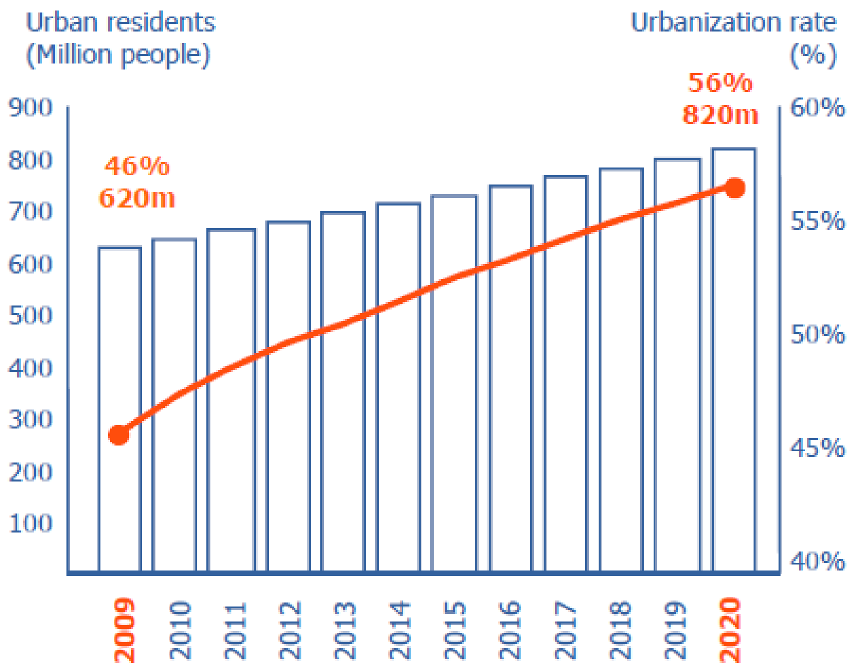
Gini Coefficient of China



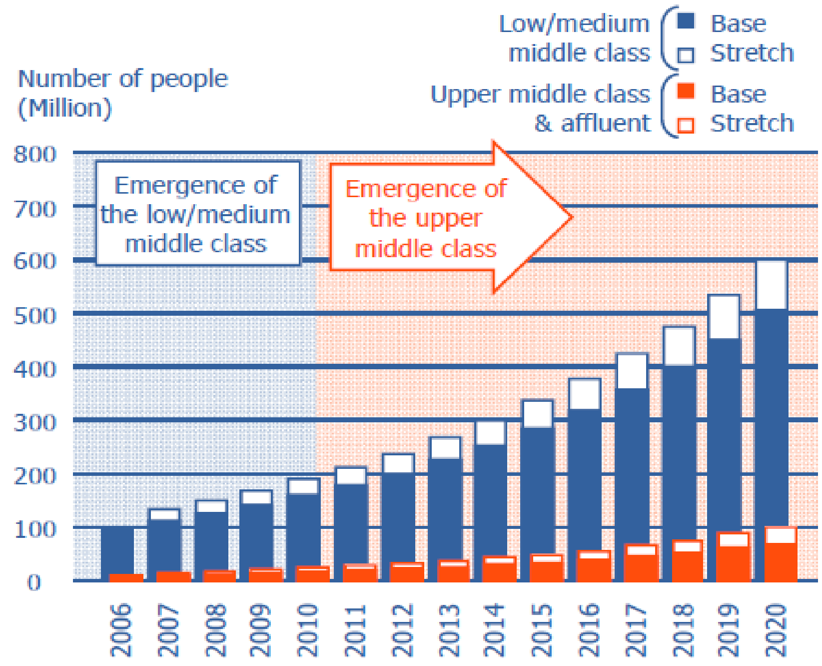
Source: BBVA Research

First objective: Rebalancing (2)

- Urbanization rate target is set at 51.5% by 2015, providing steam for economic growth.
- The income increase of China will strongly boost consumption.



Source: China City Planning & Design Institute.



Source: InterChina analysis.
Note: Low/medium middle class = USD 4-12,000.
Upper middle class & affluent > USD 12,000.

Source: Interchina

Second objective: Restructuring (1)

- Economic restructuring intends to embark China on a self-relying and innovation-driven growth track.

- The government aims to create a good environment for transforming the economic development mode:
  - ✓ optimizing industrial structure
  - ✓ ensuring balanced regional development
  - ✓ promoting urbanization
  - ✓ boosting energy-saving and environment-friendly industries.

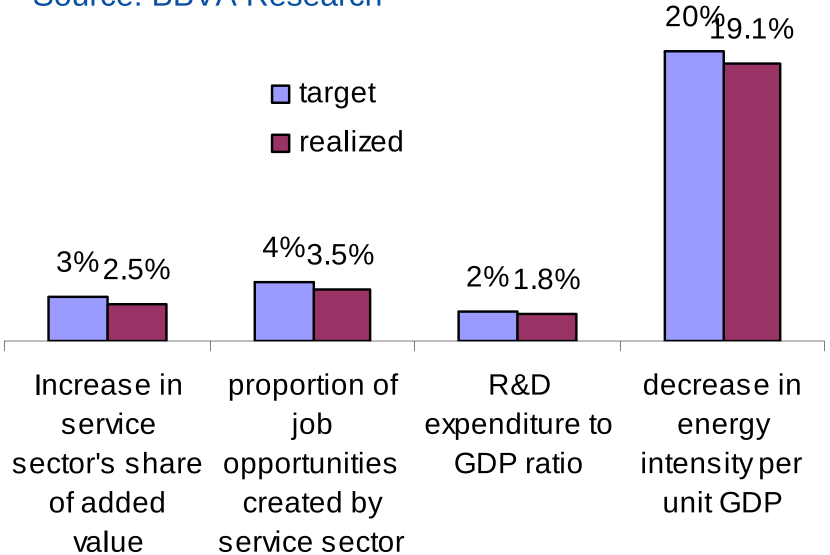
- The Plan proposes the coastal regions be transformed from manufacturing base to a hub for R&D, advanced manufacturing and servicing.

Second objective: Restructuring (2)

- The Plan highlights the need to support service sector and aims to raise its share of GDP by 4%.
- Among the four missed targets during the 11th FYP two were service-centered
- Thus, this looks like a challenging area

Missed targets during the 11th FYP

Source: BBVA Research



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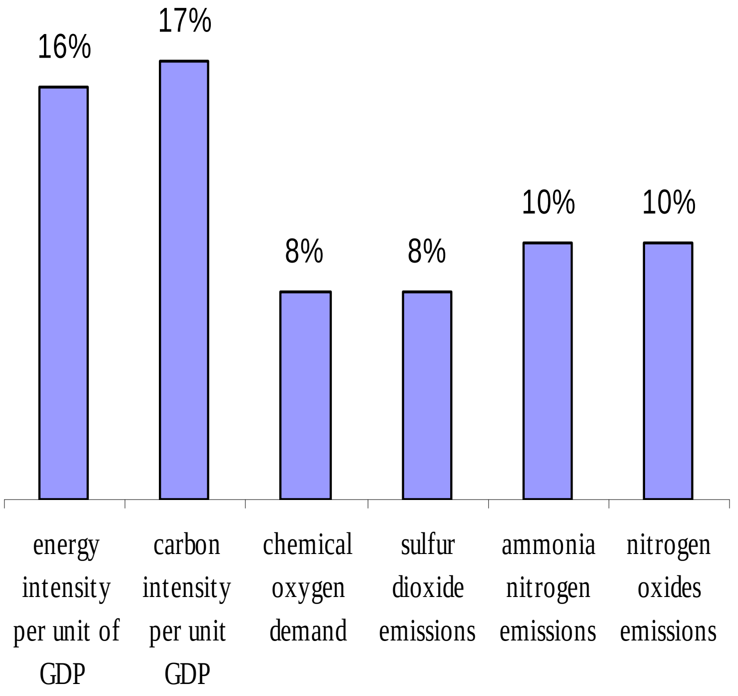
An environmental friendly growth model

- Tougher targets on environment protection, aiming to reduce energy intensity & carbon intensity.
- Increased the number of major pollutants from three to five.
- New binding targets for total stock of forest land and share of non-fossil fuels in primary energy consumption.

Energy intensity and & pollutants decrease target

Source: BBVA Research



Innovation as vehicle for restructuring

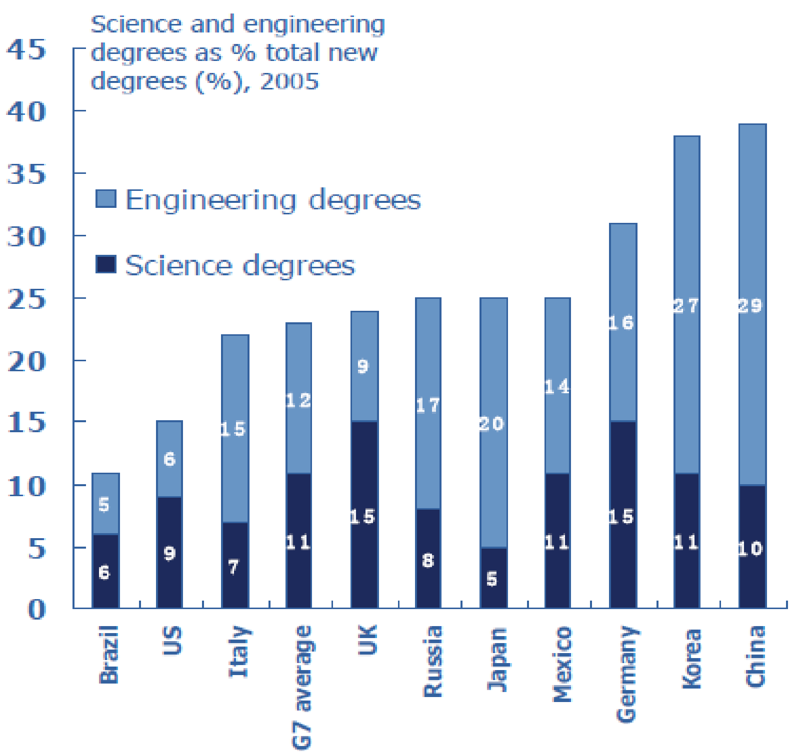
- Need to develop advanced manufacturing industry while focusing on technological renovations in traditional manufacturing industries.

- Two targets set
  - ✓ expenditure on R&D to account for 2.2% of GDP
  - ✓ every 10,000 people to have 3.3 patents

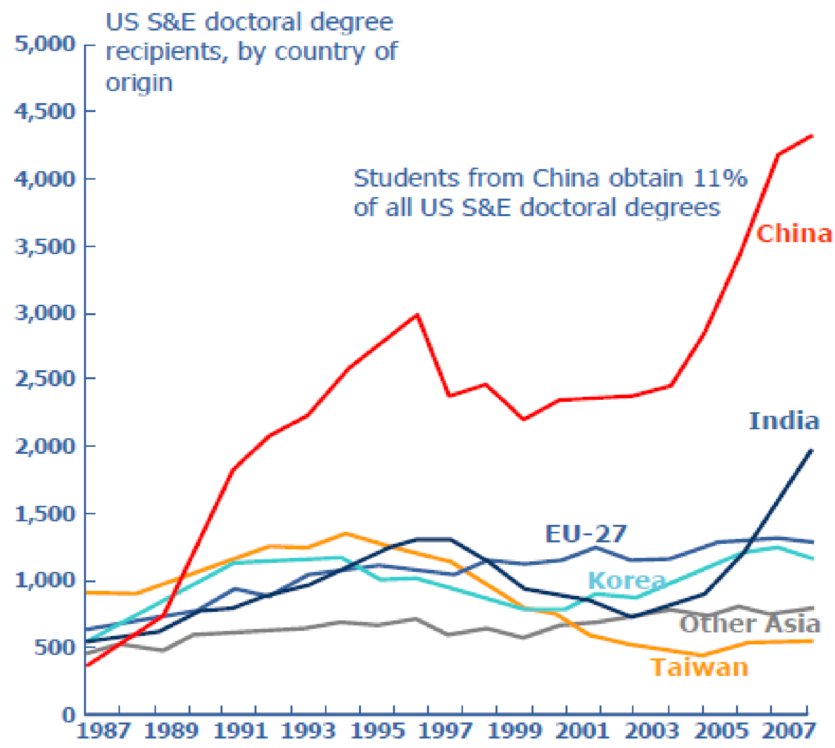
- One more long term target:
  - 300 billion USD R&D expenditure by 2020 (2.5% GDP)

Infrastructure to support innovation

- Indigenous innovation needs a large number of highly educated talents, in which China has a good foundation.
- China basically there in human capital: it produces >500,000 Engineers/Year



Source: OECD, Goldman Sachs Group Global Markets Institute

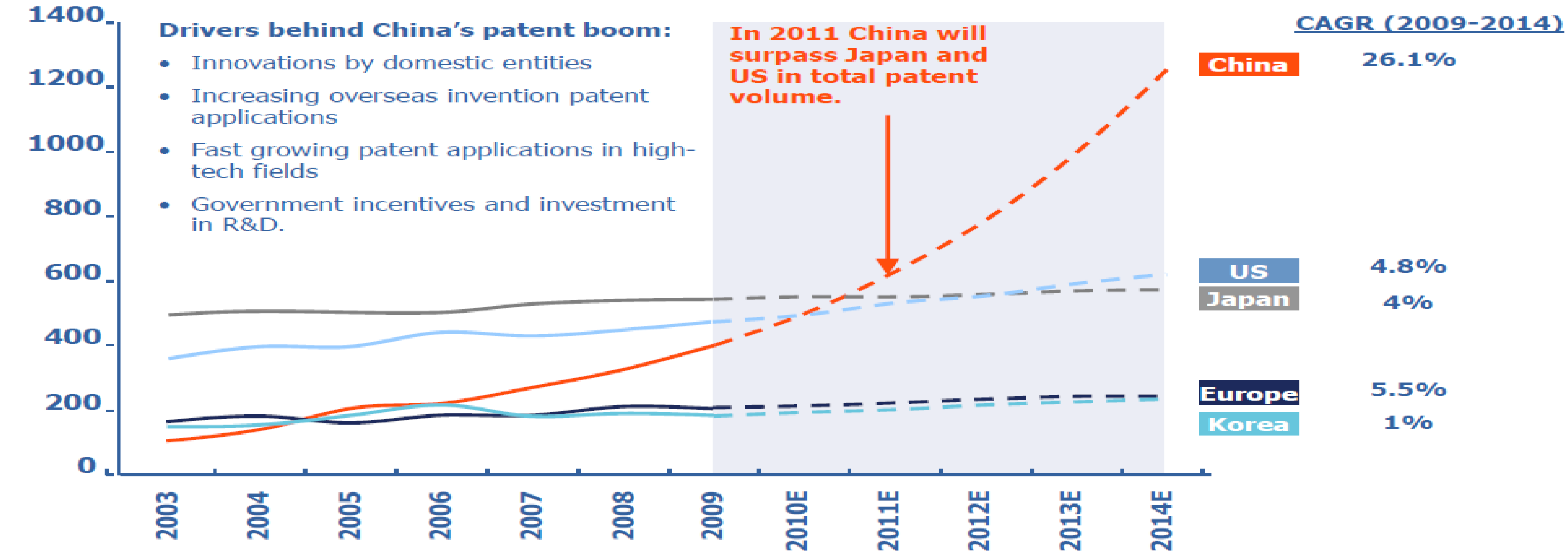


Source: National Science Foundation

Great potential in innovation

- China's patent volume is anticipated to exceed US and Japan in 2011 whereas the quality of these China's patents are widely questioned.

Total Patent Volume (x1,000)



Source: Thomson Reuters - Patented in China: The Present and Future State of Innovation in China

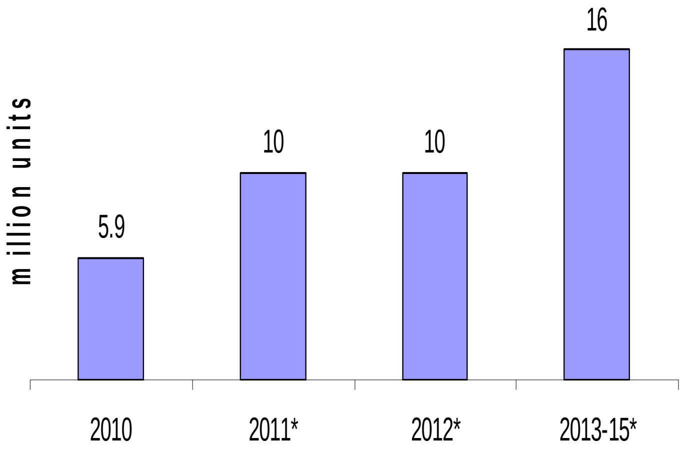
Third objective: Welfare (1)

- Specific targets were set:
  - ✓ lift the share of household income in overall economy
  - ✓ enlarge employment
  - ✓ improve the threshold of minimum wage
  - ✓ build public housing
  - ✓ increase coverage of basic & medical insurance.
- "three-dimensional rural issues" - rural economy, rural development and rural demography – to be further pushed forward by abolishing agricultural taxes and various sub-charges.
- Income disparity to be reduced partly by reforming personal income tax

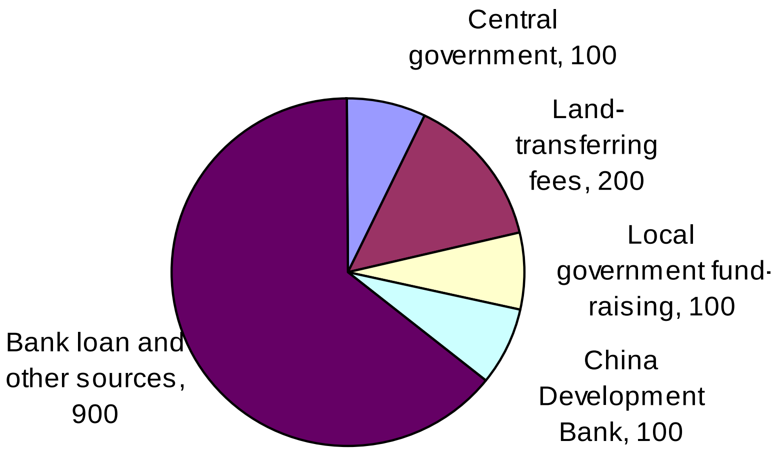
Public housing in agenda (1)

- A total of 36 million units of public housing are targeted for 2011-15.
- Financing on local governments and encouraging private funds to participate.

Target of public housing
Source: BBVA Research



Source of funding for public housing 2011
Unit: RMB billion
Source: BBVA Research



Public housing in agenda (2)

- Concern about additional burden on local governments' budgets beyond that related to carrying out the infrastructure plans in the fiscal package
- Local government financing vehicles (LGFVs) used for that purpose now very indebted
- Currently, the authorities have already forbidden the local governments to provide guarantee for LGFVs with the exception of public housing programs.

Outline

Sectors vs keywords of the 12th FYP

- The Plan sent positive signals on sectors associated with following keywords:
  - ✓ Domestic consumption
  - ✓ Services
  - ✓ People's livelihood
  - ✓ Innovation
  - ✓ Environment protection
  - ✓ Energy saving

Domestic consumption

- GDP per capita exceeding USD 4000 in 2010 signifies potentials of consumption tilting towards brand, durable goods and service.
  - ✓ clothing with good brand
  - ✓ milk industry
  - ✓ wine & beer
  - ✓ quick frozen products
  - ✓ tourism
  - ✓ drug & medicine
  - ✓ retailing
  - ✓ luxury goods

Service sectors (1): for manufacturing

- Services for manufacturing a priority.
    - ✓ modern logistics
    - ✓ leasing
    - ✓ business service
    - ✓ information service
    - ✓ technology service
    - ✓ venture capital service
    - ✓ intellectual property service

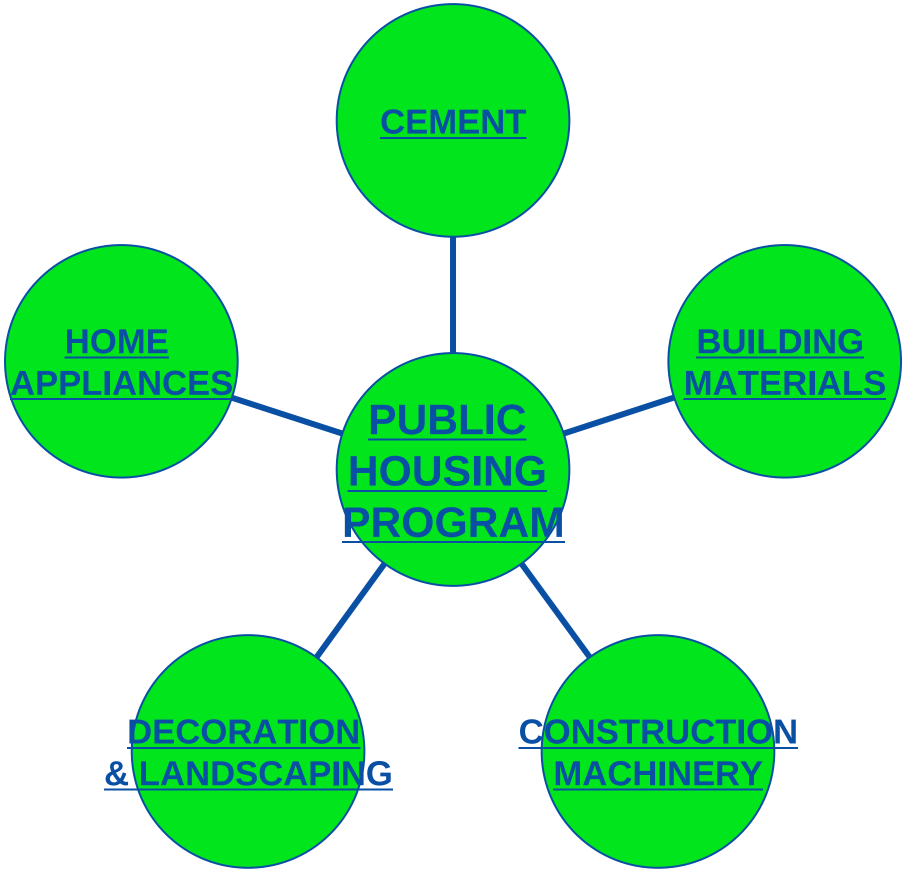
Service sectors (2): on daily life

- Daily life services will create new job opportunities.
  - ✓ tourism industry
  - ✓ media & culture
  - ✓ medical & rehabilitation

People's livelihood

- Real estate still important at least for public housing

- Sectors in the chain will benefit, e.g.:
  - ✓ *Cement:*
  - ✓ *Home appliance*
  - ✓ *Construction machinery:*



Emerging strategic industries (1)

- Seven industries are mentioned in the Plan at the center of China's industrial policy for next 5 years

  - ✓ *renewable energy*
  - ✓ *new materials*
  - ✓ *life sciences*
  - ✓ *information networks*
  - ✓ *biomedicine*
  - ✓ *marine space development*
  - ✓ *geological exploration*

Emerging strategic industries (2)

- Emerging strategic sectors are listed as "ENCOURAGED":
  - ✓ innovated and environment-protection material on aircraft, geological exploration, automobile, etc.
  - ✓ specialized manufacturing equipment on battery for electric vehicle
  - ✓ key parts of automobile of renewable energy
  - ✓ hi-tech green battery
  - ✓ PIv6-based internet system, terminal, monitoring equipment, software & chip.
  - ✓ regenerated water plant
  - ✓ charging station and battery replacement station for vehicles

Sectors on environment protection

- Equipment and service providers in the following field will be fostered:
  - ✓ sewage treatment
  - ✓ solid waste management：waste incineration
  - ✓ air pollution treatment：desulfurization and denitration

Sectors on energy saving

- New energies are expected to take up a larger share by 2015
  - ✓ wind power: 310 GW
  - ✓ solar photovoltaic power: 90 GW
  - ✓ nuclear power (??): 40 GW
  - ✓ Hi-voltage electricity grid
  - ✓ Other clean energies
- Hydro to see largest capacity increase (920 GW by 2015)
- However, the fossil fuel demand will continue to soar underpinned by China's fast growth.

Traditional strategic sector: telecommunication

- A total of RMB 1.4 trillion was invested in telecommunication sector during the 11th FYP.
- This number is expected to reach RMB 2 trillion during the 12th FYP, with a focus on broad band construction.
- Band width per person will be tripled compared to that of the 11th FYP.
- An era of 3G and 4G has come, fostering an exponential increase in of business value for both service providers and equipment providers.
- Related to consumption, service and people's livelihood.

Traditional strategic sector: high-speed railway

- A total of RMB 2.2 trillion was invested on railway network, mainly high-speed ones, during the 11^{th} FYP.
- We expect that an annual average of RMB 500 billion will be invested in the field during the 12^{th} FYP.
- Equipment providers, especially those on safety control and information processing, will be the main beneficiaries.
- Related to consumption, service and people's livelihood.

Traditional strategic sector: irrigation & water conservancy

- Among the 1.83-billion-acre arable lands, effectively irrigated areas only account for 46% and are showing a diminishing trend.
- The case is especially serious in northeastern China that are traditionally the most important food production base.
- Small- and medium-size irrigation and water conservancy facilities will become the main force.
- We expect a total investment of over RMB 40 billion in the field.
- Related to energy saving, environment protection, and people's livelihood.

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