

China's Economic Growth and Structural Transition since 1978*

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Abstract: *Over the past 40 years of reform and opening-up during 1978-2018, China's rapid economic growth has become a miracle in world economic history and reshaped the world economy. In the 40 years, China has successfully transformed from an isolated agricultural country into the world's largest industrial manufacturer. In 2018, China's urbanization rate is expected to reach 60% with per capita GDP expected to reach 9,000 USD. After another 5 to 8 years, China will join the rank of high-income countries, successfully cross the middle-income trap and become a moderately prosperous economy in all respects. In its modernization drive, China will follow the new concept of "innovation, coordinated, green, open and shared development" and strive to achieve its "two centennial goals".*

Keywords: *growth transition, high-quality development, service-based economy, reshaping of efficiency model.*

JEL classification code: N15, N65, O14

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1. China's Rapid Growth since 1978 and International Comparison

China's sustained and rapid economic growth over the past four decades has reshaped the world economy. In 2016, China contributed 41% of world economic growth. In the new normal, China has shifted from rapid yet volatile growth to medium-high growth rates with less volatility.

1.1 China's Rapid Growth

Since reform and opening-up in 1978, China's economy has been growing at almost 10%. In the first 25 years during 1978-2002, China's GDP growth rate averaged 9.7%. This period can be divided into the following stages: the inception of China's reform and opening-up program, the period of bringing order to chaos and implementing rural land contract system during 1978-1984, the development of township and village enterprises during 1985-1988, and the period of economic adjustment during 1989-1991. Deng Xiaoping's talks during his tour to south China unveiled a new chapter of China's opening-up in full swing. The Third Plenum of the 14th CPC Central Committee in 1994 established socialist

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改革开放40年中国经济 增长与结构变革^{*}

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摘要: 1978~2018年中国改革开放40年来,经济的高速增长成为了世界经济增长的奇迹,也重塑了世界经济增长的格局。40年间,中国成功地从一个封闭的农业国转变为全球最大的工业制造国,又从工业化迈入到城市化。2018年中国城市化率预计将达到60%,已经成为以城市经济为主体的现代化国家。2018年中国人均GDP预计将达到9000美元,再过5~8年或将迈入高收入国家行列,成功跨越中等收入陷阱,进入到全面小康后的富裕经济阶段。中国秉承创新、协调、绿色、开放、共享的新发展理念推进中国的现代化建设,努力完成“两个一百年”的奋斗目标。

关键词: 增长转型; 高质量发展; 结构服务化; 效率模式重塑

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一、中国改革开放40年经济的高速增长与国际比较

中国经济40年增长的现实事实是持续高速增长,并通过高速增长带动了世界经济,重塑了世界经济格局,2016年中国支撑了全球经济增长的41%的贡献,国内经济从高波动、高增长走向了低波动、中高速增长的新常态。

(一) 中国经济高速增长

中国改革开放以来,经济增长保持了近10%的增速,1978~2002年,前25年GDP平均增长率为9.7%,期间经历了中国改革开放的探索期,1978~1984年的“拨乱反正”和农村土地承包制,1985~1988年的乡镇企业带动期,1989~1991年的经济调整期。1991年邓小平南方谈话迎来了中国全面对外开放的新历史时期,1994年十四届三中全会奠定了社会主义市场经济理论,期间经历了1997年亚洲金融危机的冲击,2001年互联网泡沫破灭冲击,中国同年12月11日成为WTO成员。

中国1978年以来的25年增长,奠定了中国改革开放从探索到成熟,中国坚定而又自信地走向了具有中

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Table 1: GDP and Per Capita GDP Growth Rates of China and Other Countries/Regions

	1978-2002	2003-2016	1978-2002	2003-2016
	GDP growth rate (%)		Per capita GDP growth rate (%)	
China	9.70	9.59	8.37	9.01
USA	3.17	1.85	2.08	1.01
UK	2.58	1.63	2.36	0.90
Germany	2.14	1.25	1.92	1.24
France	2.33	1.09	1.83	0.52
Japan	2.96	0.86	2.50	0.89
S. Korea	7.98	3.59	6.82	3.05
Singapore	7.25	5.60	4.76	3.42
Malaysia	6.48	5.10	3.80	3.21
Thailand	6.19	3.89	4.64	3.36
Indonesia	5.12	5.49	3.20	4.12
Philippines	2.78	5.56	0.25	3.77

Source: the World Bank WDI Database.

market economic theory, followed by the eruption of the Asian financial crisis in 1997, the burst of dot-com bubble in 2001 and China's accession into the WTO on December 11 in that year.

In the first 25 years after 1978, China's reform and opening-up became sophisticated. With great resolve and confidence, China created a socialist market economy with its own characteristics. The achievements of reform and opening-up are indisputable. After 2003, China's industrial and urban development gained momentum. In 2011, China's urbanization rate exceeded 50%. In 2012, China's service sector replaced industry as a new growth engine. Amid this transition, China shifted from rapid growth to medium-high growth, i.e. 9% on average during 2003-2018. Over the past four decades, China has led the world in terms of economic growth in various stages.

As international comparison reveals, China's economic growth rate is more than double the level of advanced economies and higher than those of emerging East Asian countries such as South Korea, Singapore, Malaysia, Indonesia, Thailand and the Philippines by more than 30% (see Table 1). Figure 1 compares China's growth with other major world economies. While it still takes time for China to overtake the US economy, China's growth is much steeper and gaps are narrowing. After the global financial crisis in 2008, China overtook Japan as the world's second largest economy. Although India's growth rate overtook China's in 2015, India remains a medium-low income country yet China is closer to the rank of high-income countries.

1.2 China's Re-Emergence Shapes the New Order of the World Economy

From the founding of the People's Republic of China in 1949 to reform and opening-up in 1978, China accounted for less than 5% of world GDP, over 1/5 of world population with per capita GDP at less than one fourth of world average, and export less than 1% of world's total. Back then, China was poor, populous and largely isolated from the rest of the world. Yet today, China accounts for 18.82% of world population, 14.94% of world GDP and 13.2% of world total export. China's per capita GDP is also getting close to world average. Rapid growth of China and other emerging market economies has reshaped the world economy. In the post-crisis era, emerging market economies overtook advanced economies in terms of their share in world GDP. China and other BRIC countries contributed over 30% and 60% of world GDP growth respectively.

China's economic rise started since 1978, a year of unprecedented economic reforms. Different from

表 1 中国与其他国家GDP增长率和人均GDP增长率的比较

国家	1978~2002年	2003~2016年	1978~2002年	2003~2016年
	GDP增长率(%)		人均GDP增长率(%)	
中国	9.70	9.59	8.37	9.01
美国	3.17	1.85	2.08	1.01
英国	2.58	1.63	2.36	0.90
德国	2.14	1.25	1.92	1.24
法国	2.33	1.09	1.83	0.52
日本	2.96	0.86	2.50	0.89
韩国	7.98	3.59	6.82	3.05
新加坡	7.25	5.60	4.76	3.42
马来西亚	6.48	5.10	3.80	3.21
泰国	6.19	3.89	4.64	3.36
印度尼西亚	5.12	5.49	3.20	4.12
菲律宾	2.78	5.56	0.25	3.77

资料来源:世界银行WDI数据库。

国特色的社会主义市场经济的道路,改革开放的伟大成绩深入人心。2003年中国经济开始从工业化、对外开放的新起点向着工业化和城市化快速转变,2011年中国城市化率超过50%,中国经济从农业人口占优的农业国转变为以城市人口占优的现代经济体。2012年服务业超过工业,成为经济发展的新引擎,中国经济结构服务化进程开启,中国经济增长逐步从高速增长转向中高速增长,2003~2018年预计增长仍能保持9%的增长速度。40年来,中国经济增长从各个阶段上看均为世界经济增长的领头羊。

通过国际比较发现,中国经济增速超过发达国家一倍以上,比新兴东亚国家韩国、新加坡、马来西亚、印度尼西亚、泰国和菲律宾等高出30%以上(见表1)。图1反映了中国与世界各大经济体增长规模的比较,从总量看中国超过美国仍需时日,但中国经济增长的斜率远高于美国,始终保持着世界经济总量前三的地位,而且具备超越美国的趋势。2008年全球金融危机后,中国经济总量超过日本并遥遥领先,成为名副其实的全球第二大经济体,而后来的赶超者印度与中国的差距较大,2015年后其增长速度正在超过中国,但印度当前仍属于中等偏低收入国家,而中国正逐步迈入高收入国家的行列。

(二)中国崛起重塑世界经济新格局

从世界经济格局看,从新中国成立到1978年,中国GDP占全球GDP的比重始终在5%以内,而人口却高过1/5,人均GDP不到全世界平均值的1/4,而出口占世界出口的比重更是不到1%,属于贫困的、封闭的发展中人口大国。改革开放近40年后,中国人口占全球的比重下降到18.82%,占世界的比重从4.9%提升到了14.84%,与之相应的中国出口占全球出口份额的13.2%,人均GDP接近世界平均水平,成为全球名副其实的第二大经济体,世界上开放的中等收入国家,正在完成向高收入经济体的迈进。以中国为首的新兴市场国家的快速增长已经重塑了世界格局。金融危机后,新兴市场经济体在全球GDP中的份额超过了发达经济体,在GDP新增量中,中国贡献超过了30%,金砖国家贡献了60%,全球经济呈现出新的增长格局。

中国经济的崛起始于1978年,中国通过对经济体制的改革和调整,加快了经济增长速度,使中国经济能

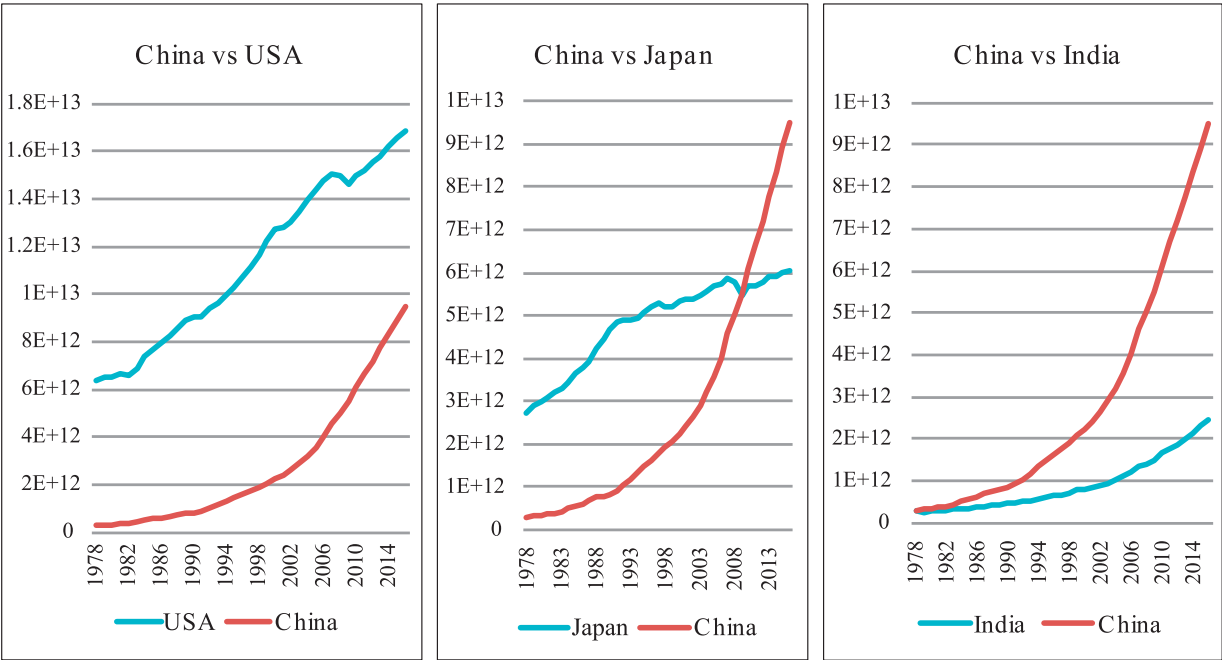


Figure 1: GDP Comparison between China and Other Major Economies

Note: GDP is in 2010 constant US dollar.

Table 2: Overview of China's Economic Performance

Indicator	1952	1978	2016
Share in world GDP	4.6%	4.9%	14.84%
Share in the world population	22.5%	22.3%	18.82%
Per capita GDP relative to world average	23.8%	22.1%	88.3%
GDP ranking	3	4	2
Share in world total export	1.0%	0.8%	13.2%

Source: Maddison (2007) and the WDI database.

the former USSR, China's economic policy was more relevant to its own realities and led to much better results. According to the WDI database, during 1978-2016, China's GDP (in 2010 constant US dollar) grew by more than 30 times with productivity up almost 20 times and per capita real income up over 20 times - these achievements were made possible by efficiency gains. For instance, farmers were given greater freedom over crop selection, which increased yield. High personal savings and FDI that turned into material capital supported industrial development. China's entry into the WTO in 2001 opened and facilitated trade. Market and competition increased China's growth tenacity.

1.3 Transition from Rapid yet Volatile Growth to More Stable Medium-High Growth

The first 25 years since 1978 is characterized by rapid yet volatile growth. Inflation, China's most important macroeconomic target before 1997, reached 9.3% in 1985, 18.8% in 1988, 18% in 1989,

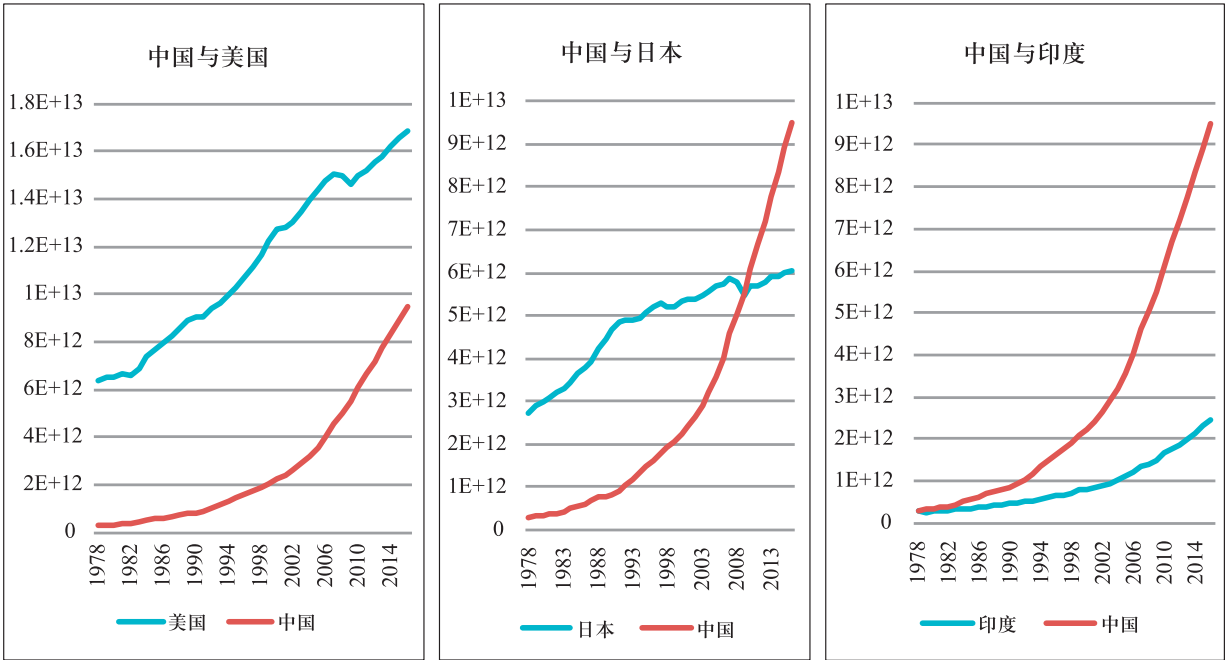


图 1 中国与各大经济体GDP规模的比较(1978~2016年)
注：GDP规模为2010年不变价美元衡量的GDP水平,单位为美元。

表 2 中国经济整体表现概览

指标	1952	1978	2016
占世界GDP的比重(%)	4.6	4.9	14.84
占世界人口的比重(%)	22.5	22.3	18.82
与世界平均水平相比的人均GDP(%)	23.8	22.1	88.3
在世界各国GDP的排名	3	4	2
占世界出口额的比重(%)	1.0	0.8	13.2

资料来源：Maddison(2007)和世界银行WDI数据库。

够保持稳定、持续、快速增长，自此中国整体发展转变为谨慎务实的改革主义。值得强调的是，中国的新经济政策是依据中国发展实际提出并践行的，与苏联的“转型”策略大相径庭，而中国和苏联改革时期的增长表现也印证了中国依据本土特征践行的发展策略更易实现增长的平稳过渡和发展。依据世界银行WDI数据库计算，1978~2016年近40年间，中国GDP(以2010年不变美元衡量)增长超过30倍，劳动生产率增长近20倍，人均实际收入增长超过20倍。中国经济的快速增长主要归因于效率的提升。农业方面，农民通过获得生产自主权极大地提高了生产积极性。工业方面，由于高额个人储蓄和外商直接投资，使中国聚集了大量的物质资本，极大地推动了工业发展和工业规模扩张。2002年中国加入世贸组织之后，更是在很大程度上开放了对外贸易，并带动了外贸的发展。这些变化都使中国经济中市场的力量逐渐增强，更容易适应和参与外部竞争，增强了

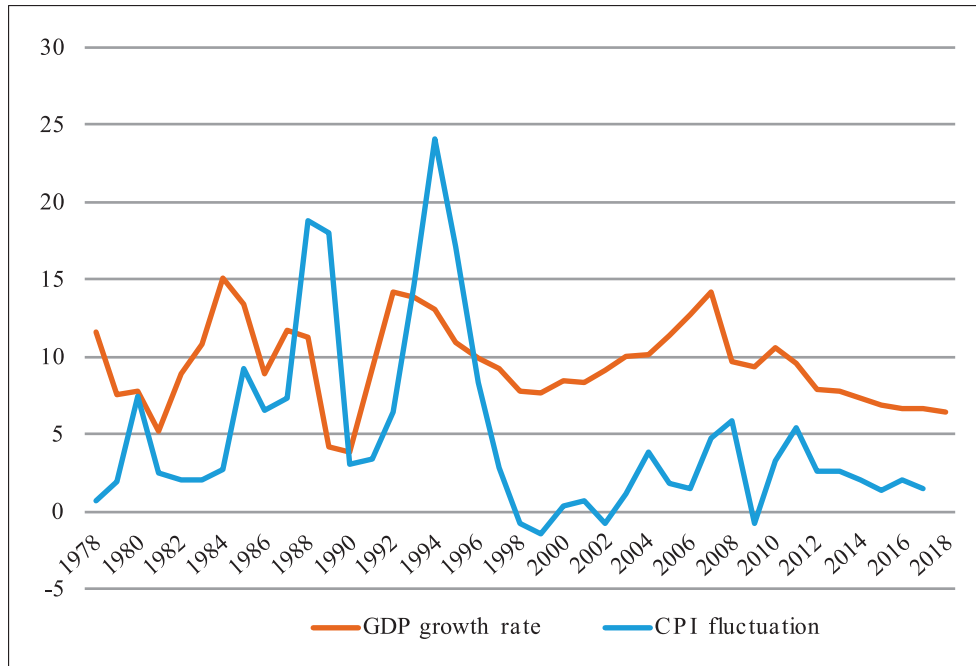


Figure 2: China's GDP Growth Rate and CPI, 1978-2018

Source: *China Statistical Yearbook 2017*, China Statistics Press.

14.7% in 1993, 24% in 1994 and 17.1% in 1995, followed by a reduction in 1997 and deflation during 1999-2001. Yet in the more recent 15 years, China's consumer price index (CPI) increased by more than 5% only in two years and was free from deflation. Measured by volatility variance (square of difference between annual value and mean value), price was 2.55 times more volatile in the first two decades than in the second two decades. After 2012, China's economic growth stayed below the 8% trajectory and continued to slide from 7.8%. As first mentioned in the *Report of the 19th CPC National Congress*, China's economy has shifted from rapid growth toward "high-quality development," implying that the government is more tolerant about slowing growth. In 2018, China's growth rate is expected to reach 6.5% or so, a shift from the rapid growth of 8-10% to medium-high growth range of 6-8%.

China's increasing economic stability is reflected as follows: First, micro-level entities behaved more rationally and restrained under market system; second, economic regulators were able to deal with complex situations as regulatory infrastructure became more sophisticated and past experience offered lessons; third, institutional reforms caused smaller shocks to the economy. Both the price reform in 1988 and SOE reform in 1998 seriously shocked China's economy. Gradualist reform that China currently follows, however, is more sophisticated and law-based with smaller impacts. Yet increasing economic openness has exposed China to external shocks and potential volatility risks.

1.4 Literature Review

International scholars have extensively discussed China's growth challenges. Many scholars investigated China's growth accounting since reform and opening-up in 1978 (Ren, 1995; Wang & Yao, 2001; Young, 2003; Holz, 2006; Zheng, Bigsten & Hu, 2006; Bosworth & Collins, 2008; Perkins & Rawski, 2008; Holz, 2013a, 2013b). According to Young (2003), China's urban TFP growth was moderate during the first two decades of reform (1978-1998) and labor deepening, including labor migration from agri-

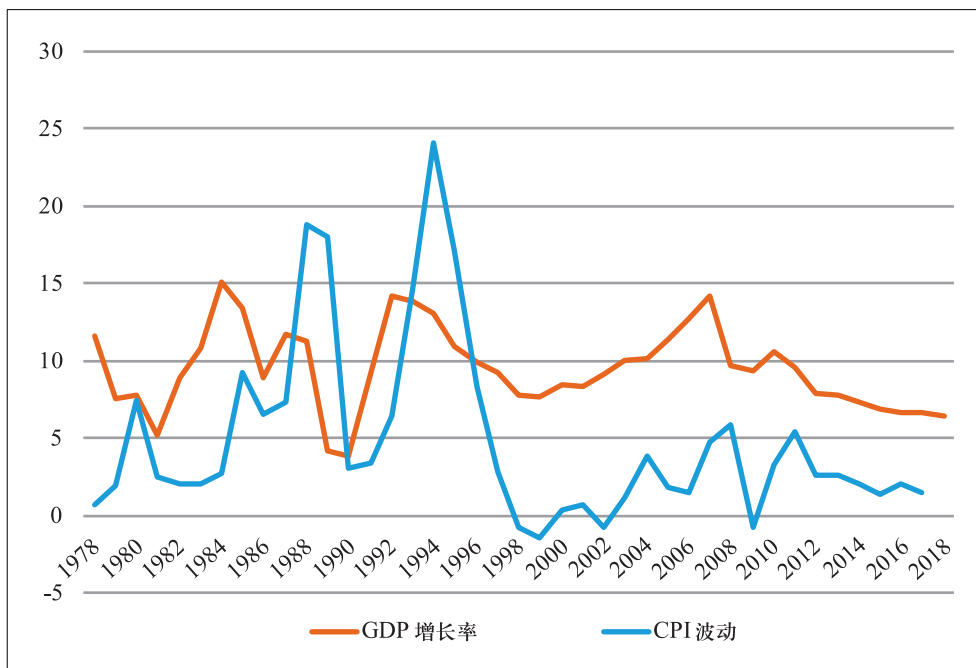


图 2 中国GDP增长率和CPI情况(1978~2018年)

资料来源:《中国统计年鉴》(2017)

自身的增长韧性。

(三) 中国经济从高波动、高增长向低波动、中高速增长成熟经济转变

中国经济改革开放前25年基本情况是高速增长伴随高波动,经济增长起伏波动大,而且通货膨胀是1997年以前最主要的调控目标,1985年通货膨胀率为9.3%、1988年为18.8%、1989年为18%、1993年为14.7%、1994年为24%、1995年为17.1%,1997年进入平稳状态,而后1999年到2001年进入通货紧缩,价格起伏很大。后15年中仅有两年价格突破5%,而且没有出现通货紧缩。用波动方差(各年的数值与均值差的平方)衡量前20年物价波动比后20年波动大十倍。从增长波动看,前20年经济增长波幅大,1984年经济增长超过15%,1989年、1990年回落到4%左右,经济大起大落,并伴随着通货膨胀,通过增长的波动方差衡量,前20年比后20年增长波动大2.55倍,后20年经济增长出现了明显的波幅收敛趋向。2012年后经济增长明显低于原有的8%的调控均值轨迹,增长速度从7.8%持续下滑。中共十九大报告中首次提出,中国经济已由“高速增长阶段”转向“高质量发展阶段”,这意味着政府对增速回落的容忍度在不断提高。预计2018年经济增长将维持在6.5%左右,中国经济从8%~10%的高速增长区间回落到了6%~8%的中高速增长区间。

中国经济稳定性的加强,直接体现在三个方面:一是市场体系的建立,微观主体理性选择和自我风险约束加强;二是成熟的宏观管理体系得以建立,宏观管理的经验加强,更能驾驭复杂的经济局面;三是改革进入深化阶段,体制改革对经济冲击程度下降。如1988年价格闯关,1998年后的国企改革,都属于对经济体系震动加大,而现有的改革秉承了“渐进式”改革的思路,越来越成熟,而且逐步进入法制的轨道,因此改革冲击相对

culture to urban sectors, served as a key driver of living standard improvement. It was not until the 1990s that people became aware of the contribution of capital deepening to China's growth, as evidenced in the surge of savings and investments. Later, some scholars paid further attention to China's inter-sectoral growth accounting and examined the contributions of sector TFP and inter-sectoral resource allocation to growth. For instance, Brandt *et al.* (2008), Brandt & Zhu (2010) and Dekle & Vandenbroucke (2010, 2012) conducted a quantitative analysis on China's structural transition and sectoral accounting after 1978. Based on a three-sector dynamic model, Brandt & Zhu (2010) investigated China's growth sources and found that agricultural labor reallocation and capital deepening had limited growth effects and may only increase TFP and serve as a key growth driver in the urban non-state sector of economy.

China also has a serious mismatch of capital: As the state sector absorbed more than half of fixed investments, improving capital allocation will vastly propel growth. Brandt *et al.* (2013) further examined the spatial and sectoral factors of China's economy. Some other scholars discussed China's reform efficiency. Song *et al.* (2011) created a growth model encompassing the characteristics of China's economic transition, including rapid growth, sustained return to capital, manufacturing reallocation and large-sum trade surplus, to discuss China's financial frictions and financing efficiency. Based on a two-sector growth model, Cheremukhin *et al.* explored China's economic growth and structural transition during 1953-2012. They systematically discussed two stages before reform (1953-1978) and after reform (1978-present) with a consistent analytical framework. With pre-reform growth as benchmark, they assessed China's growth efficiency after reform in 1978 and found that China's GDP growth rate after reform and opening-up is 4.2 percentage points higher compared with the scenario of pre-reform growth policy and model. Meanwhile, agricultural workforce reduced by 23.9%.

Some scholars investigated the growth paths that may face China as it crossed the threshold of a medium-high income country. For instance, Eichengreen *et al.* (2012) examined when and under what circumstances will a fast-growing economy experience a growth slowdown. Their study found that growth may slow when per capita income measured by 2005 constant US dollar reaches 17,000 USD and forecasted that China would soon reach this level in 2015. Growth may also slow for countries with undervalued real exchange rates and countries with high dependency ratios and investment rates. Eichengreen *et al.* (2014) further demonstrated that growth is more likely to slow within two income ranges of 10,000-11,000 USD and 15,000-16,000 USD rather than at specific time points. In their transition towards high-income stage, most fast-growing economies experienced two rounds of deceleration. It was also noted that growth rarely slowed for countries with a well-educated population and significant high-tech export. As a fast-growing economy advances to a higher level, it must strive to foster skilled workforce or human capital and move up the value chain to avoid falling into the "middle income trap". ADB (2012) also stressed that China's economy has been dominated by low-value traditional industries due to backward modern service sector and that human capital plays a pivotal role in transforming growth pattern.

Chinese scholars extensively discussed China's growth issues. Based on the study of the structural acceleration during China's industrialization and the structural deceleration for service-based economy, China Economic Growth Frontier Research Group identified the direction of structural change in the middle-income stage as an important area of research: Structural slowdown will occur if structural change has led to inefficiency and reduced TFP contribution, thus preventing a country from crossing middle-income stage. China's structural deceleration and efficiency shocks have also been discussed in detail (Research Group, 2013-2014). Based on international comparison, Zhang (2015) argued that China should transition into a service-based economy. Since structural distortion is the fundamental factor of a country's external and internal instability, structural transition is crucial to middle-income countries.

Some other scholars discussed whether China will fall into the middle-income trap. From a risk control perspective, Yao (2015) believed that the key in avoiding the middle-income trap is to prevent mone-

较小。中国经济成熟度不断提高降低了波动,但开放程度越来越高,外部冲击的影响会加大,这是中国未来发展需要特别关注和防范的外部冲击带来的波动风险。

(四)文献梳理

国外学者对中国经济增长问题展开了深入探讨。很多学者对1978年改革开放以来的中国经济增长核算问题进行了研究(Ren,1995; Wang & Yao,2001; Young,2003; Holz,2006; Zheng,Bigsten & Hu,2006; Bosworth & Collins,2008; Perkins & Rawski,2008; Holz,2013a,2013b)。Young(2003)研究指出,改革前20年(1978~1998年)间,中国非农部门TFP增长是温和的,而劳动力深化包括劳动力从农业部门的向非农业部门的流动是人均生活水平得到极大提高的主要驱动力。直至20世纪90年代,储蓄和投资的快速增长才使人们关注到资本深化对中国增长的贡献。随后,一些学者进一步关注于中国部门间的增长核算问题,研究了部门TFP和部门间资源配置对增长的贡献。如,Brandt 等(2008)、Brandt和Zhu(2010)、Dekle & 和 Vandenbroucke(2010,2012)等文献尝试对中国1978年之后的结构转型和部门核算进行定量分析。Brandt和Zhu(2010)基于三部门动态模型,以考察中国经济的源泉。其研究发现,农业劳动力再配置和资本深化对增长的影响较小,仅在非农部门中的非国有经济部分能有效提升TFP,成为驱动增长的核心动力。中国资本错配现象也较为严重,国有经济部分吸收着超过半数的固定资产投资,资本配置的改善将会在极大程度上拉动增长。Brandt 等(2013)进一步对中国经济的空间和部门要素楔子进行研究。另有一些学者对中国经济的改革效率进行了讨论。Song等(2011)构造了包含中国经济转型特征的增长模型,包括高速增长、资本持续回报、制造业部门再配置以及大额贸易盈余等,以考察中国的金融摩擦和融资效率问题。Cheremukhin 等(2015)通过一个两部门增长模型,对中国1953~2012年经济增长和结构转型问题进行了探讨。其试图通过一个统一的分析框架对改革前(1953~1978年)和改革后(1978年至今)两个阶段进行系统讨论。其以改革前增长阶段为基准来对1978年改革之后的增长效率进行评估,其研究发现,改革开放后的GDP增长率比如果沿用改革前的增长政策和模式高出了4.2个百分点,同时,农业部门的劳动力也减少了23.9%。

关于中国当前所处的中等偏高收入阶段,一些学者对中国可能面临的增长路径进行了分析。如,Eichengreen 等(2012)以中国是否会经历增长减缓从而落入“中等收入陷阱”为研究出发点,围绕快速增长经济体何时或在何种条件下会出现增长减缓展开研究。其研究发现,从人均收入水平来看,增长减缓较容易发生在以2005年不变美元衡量的人均收入达到17000美元时,并且预计中国在2015年不久之后即将达到这一水平。同时,从国家的增长特征判断,增长减缓较容易出现于在维持实际汇率低估的国家,同时,较高的老龄人口依存率以及高投资率等特征也较容易使得经济体面临增长减缓。Eichengreen 等(2014)进一步研究表明,增长减缓并非只出现在单一时点上,而是在10000~11000和15000~16000两个收入区间内发生减缓的可能性均较大,多数快速增长经济体在向高收入阶段跨越过程中都曾经历过两次增长减缓过程。同时指出,较少出现增长减缓国家的主要特征为:受过中等和高等教育的人口占比较高、高技能产品出口份额较大等。也就是说,快速增长经济体在发展到较高阶段时,需要重视高质量的技能劳动或人力资本,以及向更高级的价值链攀升,形成高附加值的经济发展形态,这样才能避免落入“中等收入陷阱”之中。ADB(2012)也强调,正是由于中

tary, debt and banking crises. Zhang (2015) noted that China must reform government intervention, prevent external financial shocks, and promote innovation and economic stability. Zhang (2013) discovered that institutions and original technology progress are particularly important for middle-income countries. According to Li (2013), 90% of China's economic deceleration is due to TFP reduction and 10% is due to insufficient capital accumulation. Li *et al.* (2015) considered that indigenous innovation and human capital contribute positively to growth stability. Jin and Tao (2015) conducted an empirical analysis on China's growth momentum in different stages in light of production, structural and institutional factors.

Scholars come to realize the importance of innovation and efficiency for China to overcome growth trap in its current stage of development. Cai (2011, 2013) stressed that China must overcome the growth bottlenecks of diminishing demographic dividends and the "Lewis turning point" in its transition from dual economy to neoclassical growth stage. Policy adjustments must be leveraged to reallocate resources, promote human capital, technology progress and institutional and efficiency improvements, and transition towards TFP-supported growth. Other scholars also stressed the importance for China to develop human capital (Yao, 2013; Wu, 2014; Zhang *et al.*, 2014). Yao (2014) believed that in the middle-income stage, China still has gaps in the quality of its enterprises, originality in scientific research and competitiveness of traditional industries. Research Group (2015) highlighted the important role of innovation factor supply in overcoming growth deceleration. The study noted that as capital-driven growth momentum lost steam, the supply of new factors, particularly knowledge sector, holds the key to transcending growth. Yuan *et al.* (2016) further indicated that balanced industrial and service sector development is essential for China to transcend the middle income stage by reshaping efficiency model based on knowledge and human capital factors through institutional reform.

2. Crossing Growth Stage through Institutional Transition

In 1978, China's per capita income¹ was only 200 USD. According to the latest World Bank standard for the classification of growth stages², China was a low-income country in 1978 (per capita income < 1,045 USD) and by 2016, China's per capita income reached 8,260 USD, a successful leap into medium-high income stage (4,105 USD < per capita income < 12,735 USD). By 2023-2025, China is expected to become a high-income country with per capita income above 12,735 USD. Institutional reform lies at the heart of China's phenomenal growth over the past four decades of transformation from a planned economy into a market-based one. This shift brought China from the verge of collapse to being the world's second largest economy.

China's economic reform has followed a gradualist approach. After smashing the "Gang of Four" in 1976, China started to "dispel chaos and restore peace" and then initiated the reform and opening-up program in the late 1970s. Reform started from the countryside. The *Several Matters concerning the Further Improvement of Agricultural Production Responsibility System* issued by the CPC Central Committee in September 1980 allows farmers to implement a two-year contract responsibility system, which breathed new vitality to agriculture. Township and village enterprises with rural collective ownership also developed rapidly. Soon after rural reform, most scholars and leaders in charge of

¹ Per capita income here refers to GNI per capita measured by constant US dollar based on Atlas method in order to be consistent with the World Bank measurement indicators for the classification of growth stages.

² According to World Bank data, the latest income grouping criteria for 2015 (GNI per capita, Atlas method, in current USD) are as follows: low-income countries (GNI per capita less than 1,045 USD); medium-low income countries (GNI per capita between 1,045 USD and 4,125 USD); medium-high income countries (GNI per capita between 4,126 USD and 12,735 USD); high-income countries (GNI per capita above 12,736 USD).

国高附加值的现代服务业的发展滞后,才使得经济始终是以低附加值的传统产业为主导,而人力资本对转变当前增长模式起到了至关重要的作用。

国内学者就中国经济增长问题也进行了详尽的讨论。中国经济增长前沿课题组从2012年开始关注中国工业化结构性加速和服务化结构性减速问题,提出了进入中等收入阶段的结构变革方向是一个最为重要的研究领域,如果结构性变革导致低效率,降低了全要素贡献就会出现经济结构性减速,无法跨越中等收入阶段。对中国结构性减速和效率冲击问题进行了细致的研究和讨论(课题组,2013,2014)。张斌(2015)通过国际比较提出了中国经济结构服务化的转变。袁富华等(2016)重点就中国经济转型时期可能面临的三方面的不确定性和风险展开研究。实际上一国结构性扭曲是导致外部和内部不稳定的根本因素,因此结构性转变对于中等收入国家是非常重要的。另外一些学者就中国是否会落入中等收入陷阱问题展开详细讨论。如从风险防范角度,姚枝仲(2015)认为跨越中等收入陷阱的根本风险是要防范货币、债务和银行危机。张平(2015)指出,中国经济转型的根本是改革政府的干预性体制并防范外部金融冲击,从而激发创新活力,促进经济平稳发展。从增长动力和稳定增长角度,张德荣(2013)发现,制度和原创技术进步对中等收入国家尤为重要;李猛(2013)指出,中国经济减速90%归因于全要素生产率的下降,10%缘于资本积累不足。李静等(2015)分析了经济减速与稳定的因素,认为自主创新、人力资本具有促进经济稳定增长的作用。靳涛和陶新宇(2015)分别从生产要素、结构因素和体制因素三个方面对中国经济不同阶段的增长动力机制进行了实证分析。

中国当前发展阶段,越来越多的学者开始关注创新和效率对突破增长陷阱的重要性。蔡 (2011,2013)强调,中国经济面临从二元经济发展阶段向新古典增长阶段的转变,最重要的是要突破人口红利消失和“刘易斯拐点”到来造成的增长瓶颈,应借助政策调整重新配置资源,着力提升人力资本,促进技术进步和体制改善提高效率,实现向全要素生产率支撑型发展模式转变。其他一些学者也着重强调了中国当前发展阶段人力资本的重要性(姚洋,2013;巫和懋等,2014;张林秀等,2014)。姚树洁等(2015)认为,处于中等收入阶段的我国面临着企业博而不精、科研活动述而不作和传统产业大而不强等问题。课题组(2015)则是突出强调新要素供给对中国突破增长减速的重要影响。研究指出,在物质资本驱动增长动力减弱的背景下,以知识部门为代表的新要素供给是实现增长跨越的关键。袁富华等(2016)在此基础上,进一步表明,中国要跨过中等收入阶段,就应顺应服务业要素化趋势,协调工业与服务业发展,通过制度改革推进以知识要素和人力资本要素积累为核心的效率模式重塑过程。

二、增长阶段的跨越与体制转型

1978年中国人均收入¹仅为200美元,依据世界银行2015年最新给出的增长阶段划分标准²,1978年中国属

¹ 此处的人均收入为依据图集法测算的不变价美元衡量的人均GNI水平,主要是为了与世界银行给出的增长阶段划分标准的衡量指标一致,保持口径一致。

² 按世界银行公布的数据,2015年的最新收入分组(GNI per capita, Atlas method (current US\$))标准为:人均国民总收入低于1045美元为低收入国家;在1045~4125美元之间为中等偏低收入国家;在4126~12735美元之间为中等偏高收入国家;高于12736美元为高收入国家。

Table 3: Middle-Income Stage for China and Other Countries

	1,045 USD < per capita income < 4,125 USD	Number of years in medium-low income stage	4,125 USD < per capita income < 12,735 USD	Number of years in medium-high income stage
China	2002-2010	8 years	2010-2025	>15 years
US	-	-	1966-1980	14 years
Germany	-	-	1973-1980	7 years
France	1962-1973	11 years	1973-1980	7 years
Japan	1967-1974	7 years	1974-1986	12 years
Singapore	1971-1980	9 years	1980-1991	11 years
S. Korea	1978-1988	10 years	1988-2003	15 years
Brazil	1975-1996	22 years	1996-2013	>17 years ³
Argentina	1964-1992	29 years	1992-2013	>21 years
Chile	1971-1995	25 years	1995-2012	17 years
Uruguay	1973-1993	21 years	1993-2012	19 years
Malaysia	1978-1996	18 years	1996-	>21 years ⁴
Thailand	1988-2009	21 years	2009-	-

economic work agreed that reform and development must increase the autonomy of enterprise operation and vitality. Inspired by former Yugoslavia's "autonomous enterprises" system, some scholars put forward micro-reform theories. The province of Sichuan carried out the reform to "increase enterprise autonomy" and Capital Steel played an exemplary role in contract system. Other enterprises also followed suit with great enthusiasm. However, the limitations of this practice later became apparent, as reflected in the uneven and imbalanced economic development.

Institutional incremental reforms were rolled out on the basis of successful rural reform. On October 20, 1984, the Third Plenum of the 12th CPC Central Committee adopted the *Decisions on Economic Institutional Reform* to "reform the entire economic system with cities as priority" and "develop socialist commodity economy", "create a reasonable price system", "invigorate enterprises and particularly large and medium-sized enterprises owned by the whole people", and "proactively develop various economic forms and operation modes". This document marks the inception of China's economic institutional reform to "foster market mechanisms outside the system".

Since 1992, China has entered into a period of coordinated reforms. In October 1992, the 14th CPC National Congress established the reform objective to create a socialist market economic system. Adopted by the Third Plenum of the 14th CPC Central Committee in 1993, the *Decisions on Creating Socialist Market Economic System* noted that "overall reform must go hand in hand with breakthroughs in priority areas" and that the goal is to initially create a socialist market economic system by the end of the 20th century.

The previous administrative contract system was reformed into a "tax-sharing system" (including provincial and county governments). In addition, China established a central bank system with inde-

³ In 2013, Brazil and Argentina crossed the high-income threshold with GNI per capita reaching 12,730 USD and 12,770 USD respectively. After 2013, however, their economies dipped with GNI per capita on the decrease, down to 8,840 USD and 11,960 USD respectively in 2016. Hence, Brazil and Argentina should have stayed in the medium-high income stage for over 17 years and 21 years respectively.

⁴ In 2016, Malaysia's GNI per capita was 9,850 USD.

表 3 中国与世界各个国家中等收入阶段增长情况

国家	1045美元<人均收入<4125美元	处于中等偏低收入阶段的年数	4125美元<人均收入<12735美元	处于中等偏高收入阶段的年数
中国	2002~2010年	8年	2010~2025年	>15年
美国	-	-	1966~1980年	14年
德国	-	-	1973~1980年	7年
法国	1962~1973年	11年	1973~1980年	7年
日本	1967~1974年	7年	1974~1986年	12年
新加坡	1971~1980年	9年	1980~1991年	11年
韩国	1978~1988年	10年	1988~2003年	15年
巴西	1975~1996年	21年	1996~2013年	>17年 ³
阿根廷	1964~1992年	28年	1992~2013年	>21年
智利	1971~1995年	24年	1995~2012年	17年
乌拉圭	1973~1993年	20年	1993~2012年	19年
马来西亚	1978~1996年	18年	1996年至今	>21年 ⁴
泰国	1988~2009年	21年	2009年至今	-

于低收入国家(人均收入<1045美元),而至2016年中国人均收入已达到8260美元,成功实现了向中等偏高收入阶段(4125美元<人均收入<12735美元)的跨越,以现在经济增长速度推算,预计2023~2025年就能成功突破12735美元进入高收入国家行列,届时,中国经济将进入到高收入发展阶段。

改革开放近40年来,中国的经济超高速增长的核心是制度变革,中国经济体制的变革是在坚持社会主义公有制的前提下,将一个计划经济制度转变成社会主义市场经济体制,这是一个为自身开辟发展道路的改革,这一制度变革使中国经济从改革前经济濒于崩溃的边缘发展到目前经济总量位居世界第二。

中国的经济改革选择了一条渐进式的改革道路。1976年粉碎“四人帮”后开始“拨乱反正”,20世纪70年代末开始改革开放。改革从农村开始,1980年9月中共中央印发《关于进一步加强完善农业生产责任制的几个问题》,允许农民自愿实行家庭承包制,两年家庭承包制就在全中国绝大多数地区普及了,农业经济气象万新。在此基础上,以农村集体所有制为主的乡镇企业也快速发展起来,国有和集体以外的乡镇企业发展探索取得了重大进展。农村改革开始不久,大多数学者和负责经济工作的领导人都认同把扩大企业经营自主权和提高企业活力放在改革和发展的中心地位,并且当时受到南斯拉夫的“自治企业”制度的影响,有的学者提出了更为理论化的微观改革方式,四川开始进行“扩大企业自主权”这一放权让利的改革,首钢成为承包的典型,企业积极性空前,但很快这种做法的局限性就表现出来,出现了宏观经济不平衡、不协调的问题。

体制增量改革在农村改革成功的基础上全面推开。1984年10月20日,中国共产党召开了第十二届中央委

³ 2013年巴西和阿根廷人均GNI分别为12730美元和12770美元,跨过高收入门槛,但在2013年之后经济出现下滑,人均GNI连续下降,2016年分别为8840美元和11960美元。因此,此处巴西和阿根廷停留在中等偏高收入阶段的时间分别应为大于17年和大于21年。

⁴ 2016年马来西亚人均GNI为9850美元。

pendent monetary policy under central government leadership. Existing banks were commercialized and policy banks were created to undertake policy tasks. In 1995, the National People's Congress adopted the *Banking Law*. China further set a goal to “transform SOE operation and create a modern enterprise system compatible with market economy with explicit ownership, clear rights and responsibilities, independent operation and science-based management”, which is written into the *Company Law* enacted by the National People's Congress, China's legislature. Socialist market economic system became established and incorporated into the legal system. In 1997, the 15th CPC National Congress made another historic breakthrough by adopting the following principles: (1) reduce the scope of the state sector of economy and gradually withdraw state capital from non-critical sectors; (2) identify various forms of public ownership to promote productivity; (3) encourage individual businesses, private businesses and other forms of non-public economy as important elements of socialist market economy.

Starting from ownership restructuring, China's gradualist reform included the following elements: developing non-public economy, restructuring “double track” economic system, reforming macroeconomic regulatory framework with linkage between public finance and taxation, and making greater efforts to propel SOE reform. After the dawn of the 21st century and particularly the 16th CPC National Congress in 2002, the reform focused on improving market economic system, social security, income distribution and environmental protection. In 2017, the *Report of the 19th CPC National Congress* stressed that the principal contradiction facing Chinese society is the “contradiction between imbalanced and inadequate development and the people's ever-growing needs for a better life”. This means that economic development will continue to take center stage in China's political and economic reforms in the coming five years - a continuation of the policy keynote to prioritize economic development since reform and opening-up. Yet the *Report of the 19th CPC National Congress* also attached unprecedented importance to redistribution. It calls for lifting all rural poor people out of poverty by 2020, a major victory in resolving the contradiction of imbalanced development. Gradualist approach of reform, supported by both theory and practice, requires step-by-step reforms carried out with pilot programs in sync with opening-up. Studies on this approach sparked extensive discussions on the “Big Bang” vs. “gradualist reform”.

To date, China's economic reform can be divided into the following stages:

(1) Stage I: inception of economic reform from the countryside based on rural contract responsibility system (from the Third Plenum of the 11th CPC Central Committee in 1978 to the Third Plenum of the 12th CPC Central Committee in October 1984);

(2) Stage II: economic reforms in full swing to invigorate urban enterprises with price reform as a key aspect of reform (from October 1984 to the 14th CPC National Congress in 1992);

(3) Stage III: initial creation of socialist market economic system (from 14th CPC National Congress in 1992 to the 16th CPC National Congress in 2001) characterized by macroeconomic reform initiatives in 1994, reform of basic systems during 1997-1999, ownership restructuring, as well as all-round opening-up since the WTO entry in 2001;

(4) Stage IV (2002-2012): improvement of socialist market economic system, including the reform of exchange rate regime in July 2005 from a fixed exchange rate regime to a managed floating exchange rate regime. On January 1, 2006, China rescinded the four agricultural taxes that had existed for over a millennium (including agricultural tax, animal slaughter tax, livestock tax and tax on agricultural and forestry specialties) and developed rural social security, created a new rural cooperative social security system, and carried out energy conservation and emission abatement on all fronts. In the aftermath of the global financial crisis that erupted in 2008, the Chinese government adopted a proactive fiscal policy with a 4-trillion-yuan stimulus and invested heavily in infrastructure and urban development in sync with financial innovation. Various forms of financial innovation that emerged were related to financing for urbanization. Surging housing prices became a new problem of

员会第三次全体会议,会议通过了《中共中央若干经济体制改革的决定》,决定“加快以城市为重点的整个经济体制的改革步伐”,“发展社会主义商品经济”;强调“要建立合理的价格体系”,“价格体系的改革是整个经济体制改革成败的关键”;提出了“增强企业活力,特别增强全民所有制的大、中型企业的活力,是以城市为重点的整个经济体制改革的中心环节”;指出“要积极发展多种经济形式和多种经营方式”。经济体制改革开始了“体制外市场化”阶段。

1992年至今,中国进入了一个整体协调改革时期。1992年10月中共第十四次全国代表大会确定了建立社会主义市场经济改革目标,1993年十四届三中全会的《关于建立社会主义市场经济体制若干问题的决定》提出了“整体改革和重点突破相结合”,要求在本世纪末初步建立社会主义市场经济体制。财政体制上将原来的“行政包干”改革为合理划分中央政府与地方政府(包括省和县级政府)事权基础上的“分税制”;在金融——银行体系方面建立了在中央政府领导下独立执行货币政策的中央银行体制;实现现有银行的商业化经营,并组建政策性银行承担原国有银行的政策性任务,1995年全国人大通过了《银行法》。

在国有企业改革基础上提出了“进一步转换国有企业经营机制,建立适应市场经济要求,产权清晰、责权明确、政企分开、管理科学的现代企业制度”,据此人大通过了《公司法》。社会主义市场经济体系逐步建立,并被纳入法律管理的框架中。1997年中共十五大又有了历史性的突破,依据“三个有利于”的原则,提出了三项内容:①缩小国有经济的范围,国有资本要逐步从非国民经济命脉的领域退出;②寻找能够促进生产力发展的多种公有制实现形式,发展多种形式的公有制;③鼓励个体私营等非公有经济的发展,使之成为社会主义市场经济的重要组成部分。

中国的渐进式改革道路从所有制结构调整开始,发展非公有制经济,而后推进“双轨制”的经济运行体系的调整,再到财税联动的宏观管理框架改革,最后用更大的精力推进国有企业的改革。进入21世纪特别是党的十六大以后,则着力完善市场经济体制,建立健全社会保障体系、完善收入分配调节机制、保护环境等。十九大报告强调,中国社会的主要矛盾是“人民日益增长的美好生活需要和不平衡不充分的发展之间的矛盾”,这意味着未来五年经济建设仍旧是中国政治经济改革的重点,也是对改革开放以来以经济建设为中心的政策基调的延续。其中,十九大报告比以前更加重视再分配的作用,在强调坚决打赢脱贫攻坚战时,提出确保到2020年中国农村贫困人口实现脱贫,这将成为解决“不平衡”矛盾的重大胜利。渐进式改革道路可以说是理论和实践互动的产物,其中增量改革、试点推广、改革和开放互相推进都具有开拓性,这一过程的理论归纳在国内和国际理论界引起了很多的讨论,如国内和国际上关于“大爆炸”与“渐进式改革”的比较研究等。

迄今为止,中国经济体制改革过程可划分为五个阶段:①第一阶段:从农村开始的经济体制改革起步阶段(1978年十一届三中全会至1984年10月十二届三中全会),主要改革举措是农村联产承包责任制。②第二阶段:以城市为重点的整个经济体制改革的全面展开阶段(1984年10月至1992年十四大),改革的中心环节是增进企业活力,改革的关键是价格体系的改革。③第三阶段:初步建立社会主义市场经济体制阶段(1992年中共十四大至2001年中共十六大),1994年宏观五项整体配套改革取得突破性进展,1997~1999年进行基本制度改革,调整所有制结构,全面对外开放,2001年加入WTO。④第四阶段(2001~2012年)完善社会主义市场经济体制阶段,采取了一系列改革和发展的举措,2005年7月国家进行了汇率制度的改革,从固定汇率向有管理的浮

urbanization.

(5) Stage V (2013-present): As China entered into the new normal and supply-side structural reforms steadily advanced, the five development concepts, i.e. innovation, coordination, green development, openness and sharing, became overarching themes of this stage. This stage is characterized by the following priorities: the goal to build a moderately prosperous society in all respects, the Belt and Road Initiative, the community of shared destiny for mankind, the need to support balanced globalization, and the principle of “seeking steady progress” under macroeconomic regulatory framework.

China’s economic growth is accompanied by its transition from an agricultural country into an urban and modernized country, which can be divided into the following stages: Stage I rural economic development (1978-1991); Stage II industrialization and rural labor migration in the context of opening-up (1992-2002); Stage III increasing urbanization. By 2018, China’s urban population is expected to reach 59% and service sector will become a dominant industry. In 2015, the share of service sector in GDP exceeded 50%. The trend of China’s service-based economy shows that China has successfully crossed industrialization stage from a typical agricultural country (in 1978, China’s rural population accounted for 82.1%) and become a modern society where urban economy holds sway.

For a backward country, pursuing industrialization could be a choice of destiny. From the day when China’s doors were forced open by the Western powers, Chinese visionaries aspired to turn China into a strong country through industrial development. For any late-moving country, industrialization, in the highest form of heavy and chemical industries, is a goal to be pursued. Before 1978, China’s heavy industrialization inevitably led to negative consequences under a highly centralized planned economy. This part of history was fraught with volatility, stagnant living standards and seriously distorted economic structure. After rapid growth in the 1950s and 1960s, China’s economy was trapped in serious stagnation in the mid-1960s and the late 1970s and was on the verge of collapse. Traditional pattern of resource allocation under the planned economy, which fettered economic growth, was replaced by a new pattern of economic growth after reform.

China’s reforms also started at the micro-level. Both enterprises and farmers all welcomed material incentives and contract systems as reform initiatives. The principle of industrial restructuring was adopted to balance reform with adjustment. The success of rural reform paved the way for future reforms and was followed by ownership restructuring and factor allocation reform. Since the “Bashan Ship Meeting” in 1988, Chinese scholars drew upon the lessons of Eastern Europe’s traditional socialist economic system, such as Janos Kornai’s concept of “shortage economy”. More importantly, they put forward a target model of reform, i.e. IIB model, characterized by market coordination with central planning. The concept of market economy ushered in great progress of reform strategies and resource allocation modes.

The key to all economic questions lies in how to increase the efficiency of resource allocation and utilization. To our knowledge, market remains the most effective means of resource allocation. For a broad range of competitive sectors, market mechanism diverts the flow of resources from inefficient sectors to more efficient sectors. It may also improve efficiency for sectors of natural monopoly that provide important public goods. This is how market economy derives its vitality and why the transition from planned economy into a market-based one is necessary.

China’s economic theories could not have made these developments without political wisdom. In 1979, Deng Xiaoping argued that socialism is not at odds with market economy. In 1984, the Third Plenum of the 12th CPC Central Committee made the statement that socialist economy is a “commodity economy with central planning under public ownership,” a decision that was praised by Deng Xiaoping as an invention of “political economics that combines basic Marxist principles with China’s socialist practice”. In early 1992, Deng Xiaoping further pointed out that “A planned economy is not equivalent to socialism, there is planning under capitalism too; a market economy is not capitalism,

动汇率进行改革转型;2006年1月1日,中国完全取消了农业四税(农业税、屠宰税、牧业税、农林特产税),在中国延续了千年的农业税消失,并积极推进农村的社保建设,建立新农合社会保障体系,全面开展节能减排等;2008年全球金融危机爆发,中国从2009年起进入到了一个反全球金融危机期,国家启动了四万亿的积极财政政策,并配合金融创新,积极为城市化的基础设施和城市化建设进行投资,这期间出现各类金融创新与城市化融资有关,房地产价格快速攀升凸显出城市化阶段的新问题。⑤第五阶段(2012年至今),中国进入新常态,供给侧结构性改革积极推进,五大发展理念,即创新、协调、绿色、开放、共享成为这一发展阶段的统领,以全面建设小康为目标,同时对外开放提出了“一带一路”倡议,人类命运共同体,并在逆全球化中高举全球化大旗,推进全球化的平衡发展,在宏观管理框架下提出了“稳中求进”,这些都是新阶段、新起点的系列总结和开创,也是这一阶段发展的客观性表述。

中国经济增长的主线可以更清晰地总结为农业国向现代化国家的转变,即体现出来的是农业——工业化——城市化,围绕的是农业人口的生产率提高——农村劳动力转移和工业化——城市化率提高进入现代化的过程。这一发展的主线表现在:第一阶段是农村经济带动(1978~1991年);第二阶段是国际化阶段带动工业化和农村劳动力大转移阶段(1992~2002年);第三阶段是城市化的提高,即城市人口比率提高,预计2018年中国城市人口占比将达到59%,服务业成为了城市经济的主导性产业,服务业占GDP比重2015年超过了50%,中国经济结构服务化趋势特征表明,中国经济社会从典型的农业国(1978年农村人口占比为82.1%)跨越工业化,进入到了以城市经济为推动力的现代社会国家。

对落后的国家来讲,选择“工业化道路”可能是宿命的选择。中国从被列强打开国门的那一天,大量的志士就开始提出工业立国思想。工业化显然是时代的抱负,也是中国增长的认知传统。对于任何后发国家而言,工业化(最高形式是重化工)都是追求的目标。中国改革开放之前,实行的是高度集中的计划经济,在一穷二白的土地上集中资源进行重工业化的实践,这种增长模式的偏差必然会导致消极后果,这方面的研究反思很多,可以观察的典型化事实是重工业自我推动导致巨大的周期波动性,居民生活水平得不到提高,经济结构严重畸形,经济增长在20世纪五六十年代出现过快速发展后,60年代中期到70年代末陷入严重停滞,经济接近崩溃边缘。传统的计划经济配置资源模式桎梏了经济增长,改革启动了新的经济增长模式。

中国在改革的探索阶段也是从微观的实践起步的。改革能激活微观经济主体的活力,不论企业还是农民,都希望通过“物质刺激”、“承包制”等激励性工具进行改革。同时,提出了调整产业结构的方针,把改革与调整相协调,经过了改革的起步阶段,农村改革的成功将改革引向了深化,所有制结构调整,整体要素配置体系改革观念也逐步引入。从1988年“巴山轮”开始,中国的学者又将东欧的对传统社会主义经济体制反思理论引入,如科尔内的“短缺经济”概念,更为重要的是提出了改革的目标模式,即所谓IIB模式,也就是有计划的市场协调,改革战略和资源配置模式因市场经济的概念引入而得到了空前发展。

一切经济问题的核心在于如何充分而合理地配置资源,提高资源的利用效率。迄今为止的经济实践和经济资料都表明,市场依然是资源配置最有效的手段。在范围较大的竞争性部门,市场机制自动引导着资源从效益低的部门流向效益高的部门,实现资源优化配置。就是那些自然垄断部门和提供重要公共产品的部门,一旦在适用范围内引入市场机制,其效率也能明显提高。市场经济的生命力正在于此。从计划经济体制转向

there are markets under socialism too". In 1992, the 14th CPC National Congress defined socialist market economic system as the target model of reform. In 2013, the Third Plenum of the 18th CPC Central Committee reaffirmed the "decisive role of market economy", which was followed by improving legal system compatible with market economy. In October 2017, the *Report of the 19th CPC National Congress* called for "improving socialist market economic system" and ensuring free flow of factors, flexible price response and a level playing field for enterprises.

China has developed its own growth model. Yet this model still features strong government interventions as part of its catch-up strategy. Given diminishing return to factor input and insufficient TFP contribution, how to reshape growth model and increase efficiency remains a strategic question. While prolonging its catch-up period, China should pursue a stable transition for sustainable development.

3. Modernization of China's Economic Structure

Under the planned economy, overemphasis on heavy industries caused serious structural distortions, which were corrected through institutional reform to ensure market-based resource allocation. The reform opened China's second round of industrialization. With rising per capita GDP and household consumption and falling Engel coefficient, the share of primary industry continuously decreased and industrialization led by manufacturing gained momentum. Urban employment became the dominant form of employment. A new chapter of economic and social modernization was unveiled. The shares of primary industry in total output value and employment dropped from 28.2% and 70.5% in 1978 to 11.3% and 40.8% respectively in 2007. In 2007, agriculture, industry and service sector contributed 3.6%, 54.1% and 42.3% to China's growth respectively. In addition, China ranks the first in the world in terms of the output of iron and steel, coal, cement, chemical fertilizer, chemical fiber, cotton cloth and durable consumer goods, the second in terms of power generation and the sixth in terms of crude oil production. China leads the world in manufacturing many high-tech products such as electronics.

In the wake of the global financial crisis that erupted in 2008, China took resolute counter-crisis measures and increased infrastructure investment, which boosted urbanization. In 2011, China's urbanization rate exceeded 50%. In 2015, agriculture, manufacturing and construction sectors accounted for 5%, 27% and 8% respectively of total employment; the share of service sector in China's employment reached 59%. Obviously, urban and service sectors became dominant sectors. By 2018, China's urbanization rate is expected to approach or exceed 60%. In the future, China's urbanization growth will slow and stabilize. Yet such growth will be driven by urban fertility rate, life expectancy and natural population growth, higher than in the countryside, instead of continued labor migration. The past four decades of reform and opening-up have witnessed China's transition from agriculture to industry and then to urban economy and an increasingly sophisticated modern service-based economy.

The evolution of China's industrial structure followed a clear path. China's first round of industrialization was supported by the former USSR through 158 industrial projects. Rural surplus production was extracted through price scissors and urban consumption was minimized to save resources to develop heavy industry. The economy developed by boom and bust. Heavy and chemical industrialization came to a halt. After reform and opening-up in 1978, China launched its second round of more balanced industrialization and recognized non-public economy. From a distorted industrial system, China has transformed into the largest manufacturer in the world. With urbanization rate above 50%, China is transitioning towards a service-based economy. In 2015, service sector accounted for more than 50% of China's economy and 59% of labor employment.

For advanced economies, their service sectors will continue to grow proportionally. For Germany and Japan, for instance, their service sectors stabilize at 70% of economy, while this ratio is 80% for some other advanced economies. Service sector accounts for less than 60% of South Korea's economy

市场经济体制的必要性和根源正在于此。

中国经济理论的发展离不开政治智慧的贡献。邓小平同志在1979年就明确提出,“社会主义为什么不可以搞市场经济”,“社会主义也可以搞市场经济”。1984年,党的十二届三中全会提出了社会主义经济是“公有制基础上的有计划的商品经济”的论断,邓小平同志高度评价当时的决定是“马克思主义基本原理和中国社会主义实践相结合的政治经济学”。1992年初,邓小平同志在南方谈话中,更加明确地指出,“计划经济不等于社会主义,资本主义也有计划;市场经济不等于资本主义,社会主义也有市场”,从而为1992年党的十四大确定把社会主义市场经济体制作为我国经济改革的目标模式,奠定了坚实的理论基础。2013年十八届三中全会再次强调了“市场经济起决定性作用”,与市场经济配套的法律体系不断完善,中国特色的社会主义市场经济逐步走向成熟。2017年10月中共十九大报告再次强调,要“加快完善社会主义市场经济体制”,指出经济体制改革必须以完善产权制度和要素市场化配置为重点,实现产权有效激励、要素自由流动、价格反应灵活、竞争公平有序、企业优胜劣汰。

中国已经形成了自己的经济增长模式,但这一经济增长模式仍然具有很强的政府干预进行赶超的性质,要素投入规模效应递减明显,全要素生产率贡献不足,经济增长模式效率重塑仍是当前重大战略问题,一方面延长赶超期,另一方面如何按新发展理念进行平稳转型,推进经济进入到可持续发展的轨道中。

三、中国经济结构的现代化

按市场方式配置资源的体制改革很快激励了中国均衡结构的发展,矫正了传统计划经济片面发展重工业造成的严重结构畸形,开始了中国的第二次工业化。工业化的主要特征就是随着人均GDP的增长,居民消费提高,恩格尔系数持续下降引致第一产业持续下降,以制造业为代表的工业化开始发展,非农就业成为了社会最主要的就业方式,取代了传统的农业社会就业方式,经济社会进入现代化进程。改革开放以来,第一产业产值和就业量占比从28.2%和 70.5%分别下降到了2007年的11.3%和40.8%。2007年农业对中国经济增长的贡献仅有3.6%,工业贡献为54.1%,服务业贡献为42.3%。中国工业化不仅表现在对经济的贡献,而且更体现了它强大的生产规模,钢铁、煤炭、水泥、化肥、化纤、棉布、耐用消费品等产品产量位居全球第一,而发电量位居全球第二、原油位居全球第六等,近年在电子等高技术行业发展迅速,很多单项的产能也是全球之冠。

2008年全球金融危机爆发,中国2009年果断采取了反危机措施,加大了基础设施的投资,城市化高歌猛进,到2011城市化率突破50%,2012年服务业占GDP的比重突破50%。2015年从劳动力就业的行业分布看,农业劳动力只有5%,工业部门中的制造业占比为27%,建筑业占比为8%;中国服务业占比为59%,中国经济结构呈现出城市主导和经济结构服务化的趋势。预计2018年城市化率将接近或突破60%,中国未来城市化率逐步进入稳定增长阶段,不是靠农村居民快速城市化,而是因城市出生率高、预期寿命长、人口自然增长高于农村,而农村老龄化和死亡率程度高于城市,主导城市化的因素从人口转移转向人口自然增长阶段,城市化的高速增长期逐步变缓。改革开放近40年,中国成功跨越了三个阶段,农业主导到工业化主导,再到城市经济主导,经济结构服务化,现代经济体逐步成熟。

Table 4: Multiple Simulated S-Shaped Growth Curves of Urbanization Rate vs. Real Urbanization Rate (%)

Year	Urbanization rate	Simulated urbanization rate	Difference between real urbanization rate and simulated urbanization rate	Year	Urbanization rate	Simulated urbanization rate	Difference between real urbanization rate and simulated urbanization rate
1978	17.9152	18.9913	-1.0761	1998	33.3502	33.4862	-0.1360
1979	18.9611	19.5383	-0.5772	1999	34.7797	34.7691	0.0106
1980	19.3911	20.0971	-0.7060	2000	36.2198	36.0744	0.1454
1981	20.1565	20.6679	-0.5114	2001	37.6597	37.4007	0.2590
1982	21.1305	21.2505	-0.1200	2002	39.0898	38.7461	0.3437
1983	21.6236	21.8450	-0.2214	2003	40.5302	40.1090	0.4212
1984	23.0143	22.4514	0.5629	2004	41.7600	41.4873	0.2727
1985	23.7069	23.0696	0.6373	2005	42.9900	42.8791	0.1109
1986	24.5249	23.6997	0.8252	2006	44.3430	44.2822	0.0608
1987	25.3193	24.3416	0.9777	2007	45.8892	45.6946	0.1946
1988	25.8147	24.9951	0.8196	2008	46.9895	47.1138	-0.1243
1989	26.2102	25.6602	0.5500	2009	48.3417	48.5378	-0.1961
1990	26.4097	26.3368	0.0729	2010	49.9497	49.9641	-0.0144
1991	26.9402	27.0248	-0.0846	2011	51.2703	51.3905	-0.1202
1992	27.4599	27.7240	-0.2641	2012	52.5701	52.8146	-0.2445
1993	27.9901	28.4342	-0.4441	2013	53.7296	54.2342	-0.5046
1994	28.5098	29.1553	-0.6455	2014	54.7704	55.6469	-0.8765
1995	29.0404	29.8870	-0.8466	2015	56.0999	57.0506	-0.9507
1996	30.4799	30.9937	-0.5138	2016	57.3497	58.4430	-1.0933
1997	31.9100	32.2273	-0.3173	2017	-	59.8220	-
-	-	-	-	2018	-	61.1857	-

and this ratio is also low for other East Asian economies where manufacturing sectors hold sway. Hence, it is not necessary for China to expand its service sector too much. In fact, China's financial services as a share in its service sector are the highest in the world and deviate from its current stage of development. Traditional sectors remain growth engines even if China strives for high-quality growth. Without clearing redundancies or introducing competition, it is likely for China to face serious risks of slowdown. China's other service sectors, such as scientific research, education, culture, health and sports, are run by government agencies. In this sense, service sector is underestimated to some extent and service sector restructuring is an important part of reform in the next stage.

From the supply side perspective, China's economy experienced the following changes in the past four decades: (1) Tertiary industry replaced secondary industry as a key growth driver, contributing 53.7% of growth in 2015. (2) Industry contributed more percentage points to growth than that of service sector in the first three decades after reform and opening-up, which was reversed only in the recent decade. Yet in the first 25 years, manufacturing sector served as a decisive contributor to growth and ranked the second in the following 15 years. (3) The trend of service-based economy is gaining momentum.

From demand side, the changes include: (1) Export contribution played a decisive role during 1995-2008, when China utilized its comparative advantage to achieve rapid growth and after 2009, China shifted towards domestic consumption and contributed to global recovery. (2) China's demand structure became more balanced with consumption contributing 59.9% in 2015, which is a reversal of distorted investment that contributed to 67.8% at the inception of reform and opening-up. As China's economy stabilized, its demand structure also became more balanced.

表 4 城市化率多重‘S’型增长曲线模拟值与城市化率实际值的比较

年份	城市化率(%)	城市化率模拟值(%)	实际城市化率与城市化率模拟值之差	年份	城市化率(%)	城市化率模拟值(%)	实际城市化率与城市化率模拟值之差
1978	17.9152	18.9913	-1.0761	1998	33.3502	33.4862	-0.1360
1979	18.9611	19.5383	-0.5772	1999	34.7797	34.7691	0.0106
1980	19.3911	20.0971	-0.7060	2000	36.2198	36.0744	0.1454
1981	20.1565	20.6679	-0.5114	2001	37.6597	37.4007	0.2590
1982	21.1305	21.2505	-0.1200	2002	39.0898	38.7461	0.3437
1983	21.6236	21.8450	-0.2214	2003	40.5302	40.1090	0.4212
1984	23.0143	22.4514	0.5629	2004	41.7600	41.4873	0.2727
1985	23.7069	23.0696	0.6373	2005	42.9900	42.8791	0.1109
1986	24.5249	23.6997	0.8252	2006	44.3430	44.2822	0.0608
1987	25.3193	24.3416	0.9777	2007	45.8892	45.6946	0.1946
1988	25.8147	24.9951	0.8196	2008	46.9895	47.1138	-0.1243
1989	26.2102	25.6602	0.5500	2009	48.3417	48.5378	-0.1961
1990	26.4097	26.3368	0.0729	2010	49.9497	49.9641	-0.0144
1991	26.9402	27.0248	-0.0846	2011	51.2703	51.3905	-0.1202
1992	27.4599	27.7240	-0.2641	2012	52.5701	52.8146	-0.2445
1993	27.9901	28.4342	-0.4441	2013	53.7296	54.2342	-0.5046
1994	28.5098	29.1553	-0.6455	2014	54.7704	55.6469	-0.8765
1995	29.0404	29.8870	-0.8466	2015	56.0999	57.0506	-0.9507
1996	30.4799	30.9937	-0.5138	2016	57.3497	58.4430	-1.0933
1997	31.9100	32.2273	-0.3173	2017	-	59.8220	-
-	-	-	-	2018	-	61.1857	-

中国的产业结构演进道路也很清晰,工业化长期稳定在高份额,中国第一次工业化主要是以苏联援建的158项工业项目为基础的优先发展重工业的工业化模式,通过剪刀差获取农村剩余,城市消费也被极度压缩用于积累,经济大起大落,并出现了停滞,重工化工业化道路难以为继。改革开放后中国推动了二次工业化,称为均衡发展的工业化,并积极鼓励非公经济发展,对外开放,中国从一个畸形的工业化体系转变成全球最大的开放、复杂的制造业体系。随着城市化率突破50%,经济结构再次呈现出服务化转型,2015年服务业比重超过了50%,劳动就业占比达59%。

从国际上的其他经济体各个阶段的服务业发展情况来看,发达国家达到成熟后服务业比重仍然会逐步上升,但相对比较稳定,如偏于制造业的德国、日本稳定在70%,而其他发达经济体则稳定在80%。东亚制造业国家的该数值比较低,如韩国一直稳定在60%以内。中国服务业也不必追求过快发展,中国金融服务业在服务业中的占比位居全球首位,与中国当前的发展阶段已经有所脱离。中国经济正转向高质量发展阶段,但传统行业仍是中国经济增长的引擎,如果不能清理冗余或引入更多的竞争机制,则可能使经济面临严重的增长放缓风险。同时,中国其他服务业中包含了太多的行政化的服务体系,如科教文卫体等非市场化部分占比很大,因此服务业在一定程度上被低估了,服务业自身结构调整是下一阶段重要的改革部分。

从供给带动看:①经济增长的带动力从第二产业转向了第三产业,2015年第三产业贡献了53.7%。②工业增长拉动的百分点在前30年的贡献都超过了服务业,只有在近10年其贡献率低于了服务业,但第二产业中

Table 5: Shares of China's Major Economic Sectors (%)

	1978	1988	1998	2008	2015
Agriculture, forestry, livestock and fishery	27.9	25.5	17.4	10.5	9.2
Production industry	44.1	38.3	40.1	41.2	34.3
Construction sector	3.8	5.3	5.9	5.9	6.8
Wholesale and retail	6.6	9.8	8.1	8.2	9.7
Transport, warehousing and postal service	4.9	4.5	5.5	5.1	4.4
Hotel and restaurants	1.2	1.6	2.1	2.1	1.8
Financial industry	2.1	4.3	5.1	5.7	8.4
Real estate	2.2	3.1	4.0	4.6	6.0
Others	7.2	7.5	11.9	16.6	19.4

Source: Maddison (2007) and China Statistical Yearbooks.

Table 6: Proportions of Service Sector for China and Other Economies (%)

	1978	1988	1998	2008	2016
China	24.6	31.2	37.0	42.8	51.6
US	-	-	75.3	77.2	78.9
Germany	-	-	67.6	69.0	68.9
France	64.4	69.1	73.7	77.6	79.2
Japan	58.0	60.8	64.8	69.9	70.1
Singapore	63.9	64.0	66.0	72.6	73.8
S. Korea	44.3	50.0	57.3	61.2	59.2
Brazil	48.3	46.2	69.5	67.3	73.3
Argentina	46.4	52.5	65.3	59.9	65.8
Chile	54.0	45.2	59.5	58.5	64.4
Uruguay	-	53.8	65.8	63.3	64.4
Malaysia	35.1	41.6	42.8	47.1	55.7
Thailand	45.9	49.2	53.5	50.3	55.8
Indonesia	-	39.7	36.7	37.5	43.7
The Philippines	34.9	41.9	50.8	53.9	59.5

Source: the World Bank WDI database.

Industrialization propelled urbanization by attracting surplus rural labor to modern sectors. Industrial development within cities and in the vicinity of cities spawned urban development zones and industrial parks. Urbanization picked up speed as farmers turned into urbanites. As industrial growth stabilized or declined, future urbanization growth will be driven by an uptick in urban employment, which holds the key to future development, in the context of service-based economy. Industrialization propels urban development, which determines a country's economic modernization reflected in human development.

4. Improvement of China's Economic Growth Quality and Reshaping of Efficiency Model

After four decades of reform and opening-up, China has entered into a medium-high income stage and is expected to join the ranks of high-income countries by 2025. China's growth model has also shift-

表 5 中国主要经济部门占比情况 单位 :%

年份	1978	1988	1998	2008	2015
农林牧渔业	27.9	25.5	17.4	10.5	9.2
工业	44.1	38.3	40.1	41.2	34.3
建筑业	3.8	5.3	5.9	5.9	6.8
批发和零售业	6.6	9.8	8.1	8.2	9.7
交通运输、仓储和邮政业	4.9	4.5	5.5	5.1	4.4
住宿和餐饮业	1.2	1.6	2.1	2.1	1.8
金融业	2.1	4.3	5.1	5.7	8.4
房地产业	2.2	3.1	4.0	4.6	6.0
其他	7.2	7.5	11.9	16.6	19.4

资料来源:Maddison(2007)和各年《中国统计年鉴》。

表 6 中国与其他经济体各阶段服务业占比情况 单位 :%

年份	1978	1988	1998	2008	2016
中国	24.6	31.2	37.0	42.8	51.6
美国	-	-	75.3	77.2	78.9
德国	-	-	67.6	69.0	68.9
法国	64.4	69.1	73.7	77.6	79.2
日本	58.0	60.8	64.8	69.9	70.1
新加坡	63.9	64.0	66.0	72.6	73.8
韩国	44.3	50.0	57.3	61.2	59.2
巴西	48.3	46.2	69.5	67.3	73.3
阿根廷	46.4	52.5	65.3	59.9	65.8
智利	54.0	45.2	59.5	58.5	64.4
乌拉圭	-	53.8	65.8	63.3	64.4
马来西亚	35.1	41.6	42.8	47.1	55.7
泰国	45.9	49.2	53.5	50.3	55.8
印度尼西亚	-	39.7	36.7	37.5	43.7
菲律宾	34.9	41.9	50.8	53.9	59.5

资料来源:世界银行WDI数据库。

的制造业在前25年是决定性的贡献者,后15年贡献份额已经逐渐排名至第二位。③服务化趋势在继续加强。

从需求结构看中国经济近40年的变化:①出口贡献在中国快速发展的1995~2008年起到了决定性的作用,利用了比较优势,中国经济增长高速发展,2009年后中国经济逐步转向内需,并对全球经济复苏起到带动作用;②中国需求结构逐步均衡,2015年消费贡献达到59.9%,也校正了改革开放之初的投资贡献高达67.8%的畸形投资,经济逐步平稳,需求结构逐步均衡。

工业化带动了城市化,体现在大量农村剩余劳动力进入现代化部门,工业在城市及城市周围的全面发展推动了城市开发区、周围的工业园迅速建立,城市化速度大幅提高,农民身份不断转换为城市人口。随着工业化增长稳定或下降,城市化率的提高完全是由经济服务化推动的非农就业比重上升所带动,未来发展的关键仍然是非农就业。工业化带动了城市化发展,而城市化的发展决定了一个国家经济结构的现代化,其经济结

Table 7: Supply-Side Pulling of Growth

	1978-2002	2003-2015	1978	1978-2015	2015
	Growth pulling		Contribution rate (%)		
Primary industry	1.13	0.43	9.8	9.93	4.6
Secondary industry:	5.43	5	61.8	53.09	41.6
Manufacturing	5.02	4.3	62.2	48.18	35.0
Tertiary industry:	3.16	4.38	28.4	36.98	53.7
Wholesale and retail	0.63	1.04	12.7	7.21	8.4
Financial sector	0.49	0.65	1.9	5.81	15.0

Source: *China Statistical Yearbook*.**Table 8: Demand Pulling of Growth**

	1978	2002	2015	1978	2002	2015
	Demand pulling			Contribution rate (%)		
Consumption	4.5	5.1	4.1	38.3	55.6	59.9
Investment	7.8	3.6	2.9	67.0	39.8	42.6
Net export	-0.6	0.4	-0.1	-5.3	4.6	-2.5

Source: *China Statistical Yearbook*.

ed from late-moving catch-up to medium- and high-end development. As envisioned by CPC Central Committee General Secretary Xi Jinping, China will “basically achieve socialist modernization” during 2020-2035. Thereafter, China will build up its wealth and power and establish its position as a modern socialist power during 2035-2050. As shown by growth theories and international experience, growth quality hinges upon productivity and TFP contribution. Quantitative expansion and disequilibrium in the previous catch-up stage must give way to “innovative, balanced, green, development and shared economic growth” in the new stage.

China must strive to improve productivity, which determines wage growth, and TFP contribution. Productivity improvement largely derives from capital-intensive industries in the early stage of industrialization and human-capital-intensive industries in a service-based economy. Productivity growth reflects the level of human capital deepening and determines a country’s welfare level. Growing TFP contribution to the economy reflects technology progress and improved allocation efficiency. TFP contribution will increase only when TFP growth exceeds factor input growth. In addition, TFP contribution measures the contribution of endogenous growth. For a country, increasing TFP contribution means that a country becomes less dependent on factor input and pursues endogenous growth. TFP growth itself is an antidote to diminishing return to scale due to human and capital deepening.

Over the past four decades, capital input has contributed to 70% to 80% of China’s GDP growth. After taking into account capital and labor contributions to growth, efficiency improvement contributes about 20% to 30% of GDP growth. Obviously, low TFP contribution reflects China’s capital-driven growth pattern. (1) Growth of capital inventory kept accelerating. As Table 9 reveals, China’s capital inventory maintained an annual growth rate of around 11% during 1978-2007, a period of sustained rapid growth for China. This growth rate is high in absolute terms no matter compared with which country in a similar development stage. Despite China’s falling potential growth rate during 2008-2013, its capital

表 7 供给端各部门对增长的拉动

	1978~2002年	2003~2015年	1978年	1978~2015年	2015年
	增长拉动		贡献率(%)		
第一产业	1.13	0.43	9.8	9.93	4.6
第二产业:	5.43	5	61.8	53.09	41.6
工业	5.02	4.3	62.2	48.18	35.0
第三产业:	3.16	4.38	28.4	36.98	53.7
批发和零售业	0.63	1.04	12.7	7.21	8.4
金融业	0.49	0.65	1.9	5.81	15.0

资料来源:《中国统计年鉴》。

表 8 需求端各部分对增长的拉动

	1978年	2002年	2015年	1978年	2002年	2015年
	增长拉动			贡献率(%)		
消费	4.5	5.1	4.1	38.3	55.6	59.9
投资	7.8	3.6	2.9	67.0	39.8	42.6
净出口	-0.6	0.4	-0.1	-5.3	4.6	-2.5

资料来源:《中国统计年鉴》。

构均衡,本质上更表现为人口资源配置和人的发展。

四、中国经济增长质量提升与效率模式重塑

中国改革开放近40年来,经济进入到了中高收入阶段,预计到2025年左右将迈进高收入国家行列。中国经济的增长模式也从后发赶超向中高端协调发展。习近平总书记指出了中国未来30年的规划目标:从2020年到2035年,中国将“基本实现社会主义现代化”;接下来2035年到2050年,中国对国家财富和权力的追求将取得成果,确立其社会主义现代化强国的地位。经济增长的理论逻辑和国际经验表明,一国经济增长质量提升需要持续的效率改进,即劳动效率改进和全要素生产率贡献比重的提升,经济增长按创新、协调、绿色、开放和共享的发展路径前行,原有的规模扩张、非平衡等赶超的路径需要向新的发展路径转变。

中国经济进入高质量发展阶段必须重视两个效率的同步提升。只有劳动生产率不断提高,人民的收入水平才能稳步提升,劳动生产率的增长速度直接决定了工资水平的提升速度,在工业化过程中是依靠“资本密集”来提升劳动生产率,而经济结构服务化后靠的是“人力资本密集”来实现生产效率提升,劳动生产率的增长反映了人力资本深化程度并决定了一国福利水平。全要素生产率对经济的贡献不断提高,是企业技术进步与配置效率提升的综合反映。只有全要素增长率超过要素投入带来的增长时,才能提高全要素生产率的贡献率,而且全要素生产率的贡献率被视为内生增长贡献水平的测量。放大至一国来看,全要素生产率的贡献比重提高意味着一个国家经济增长逐步摆脱要素投入带来的增长,进入到内生增长的道路,而全要素生产率增

Table 9: Decomposition of Production Function

	1978-2018	1978-2007	2008-2018
[1][Three potential growth (production function fitted) factors]	9.50	10.03	8.08
[2] Capital input (K): elasticity	0.635	0.636	0.631
[3] Share of capital contribution= $([2] \times [8]) / [1]$	71.69%	64.83%	87.05%
[4] Labor input (L): elasticity	0.365	0.364	0.369
[5] Share of labor contribution= $([4] \times [11]) / [1]$	8.73%	11.84%	2.23%
[6] tfp: growth rate	1.86	2.34	0.866
[7] share of tfp contribution= $100 - [3] - [5]$	19.58%	23.33%	10.72%
[8] Capital input growth rate($k = dK/K$)= $[9] \times [10]$	10.99	10.96	11.04
[9](Net) investment rate (I/Y)	45.44	39.31	130.76
[10] Capital efficiency (Y/K)	0.242	0.302	0.079
[11] Labor input growth rate ($l = dL/L$)= $[12] + [13]$	2.272	3.263	0.504
[12] Growth rate of working-age population (pop_t)	2.603	3.709	0.657
[13] Change in labor participation (θ_t)	-0.331	-0.446	-0.153
[14] Growth rate of labor productivity($y = Y/L$)= $[15] + [16]$	3.741	3.88	3.433
[15] Growth rate of capital efficiency (Y/K)	-5.429	-4.765	-7.12
[16] Growth rate of capital per capita (K/L)	9.17	8.645	10.553

Source: China Economic Growth Frontier Research Group, *Economic Growth Blue Paper (2017-2018)*, General Report: *Medium and High-end Transition and Structural Reforms*, Social Sciences Literature Press, August, 2017.

stock still maintained a high growth rate of 11%-12%. (2) Marginal return to capital continued to diminish. Long-term dependence on investment caused marginal return to capital to diminish. The vicious cycle of diminishing return and sluggish growth, together with inefficient capital-driven growth pattern, became apparent. As Table 9 shows, capital efficiency (Y/K, ratio between GDP and current-year investment) was 0.302 during 1978-2007 and only 0.079 during 2008-2015.

We calculated China's TFP using a simple Cobb-Douglas production function: (1) TFP contributed 23.33% of growth during China's economic takeoff of 1978-2007. During 1993-2007, TFP contribution to growth exceeded 35% (Lu *et al.*). Yet during 2008-2018, as growth slowed, TFP contribution fell below 20%. This period was characterized by a hefty stimulus to increase capital accumulation. As return to the scale of capital diminishes, potential growth rate will continue to decline unless the low TFP contribution is reversed.

Economic restructuring, institutional compatibility and efficiency path reshaping are fundamental for China to cross the threshold of a new development stage. Since the 19th CPC National Congress, the basic approach for economic development further improved with emphasis on the following elements: first, to propel high-quality development; second, strive to transform growth pattern, economic structure and growth momentum; third, accelerate the development of a modern economic system with high quality and efficiency. In the middle-income stage, great uncertainties exist in China's efficiency path, development mechanism and restructuring. Without proper mechanisms to support restructuring, upgrade and shift to a new efficiency path, it would be difficult, or at least very slow, for growth to transcend the bottlenecks.

In the industrial era, the "structuralism" of developmental economics elicited extensive policy dis-

表 9 生产函数分解

	1978~2018年	1978~2007年	2008~2018年
[1]潜在增长(生产函数拟合)三因素]	9.50	10.03	8.08
[2]资本投入(K):弹性	0.635	0.636	0.631
[3]资本贡献份额 $=([2] \times [8]) / [1]$	71.69%	64.83%	87.05%
[4]劳动投入(L):弹性	0.365	0.364	0.369
[5]劳动贡献份额 $=([4] \times [11]) / [1]$	8.73%	11.84%	2.23%
[6]TFP:增长率	1.86	2.34	0.866
[7]TFP贡献份额 $=100-[3]-[5]$	19.58%	23.33%	10.72%
[8]资本投入增长率 $(k=dK/K)=[9] \times [10]$	10.99	10.96	11.04
[9](净)投资率 (I/Y)	45.44	39.31	130.76
[10]资本效率 (Y/K)	0.242	0.302	0.079
[11]劳动投入增长率 $(l=dL/L)=[12]+[13]$	2.272	3.263	0.504
[12]劳动年龄人口增长率(pop_t)	2.603	3.709	0.657
[13]劳动参与率变化率 (θ_L)	-0.331	-0.446	-0.153
[14]劳动生产率增长率 $(y=Y/L)=[15]+[16]$	3.741	3.88	3.433
[15]资本效率 (Y/K) 增长率	-5.429	-4.765	-7.12
[16]人均资本 (K/L) 增长率	9.17	8.645	10.553

资料来源:中国经济增长前沿课题组:《经济增长蓝皮书(2017~2018)》,总报告:《迈向中高端与供给侧结构性改革》,社科文献出版社2017年版。

长本身才能克服人力、资本深化带来的规模报酬递减问题。

改革开放至今近40年来,资本投入对GDP增长的贡献,一直维持在70%~80%的水平,综合考虑资本、劳动力对增长的贡献之后,效率改进对GDP增长的贡献大致维持在20%~30%的水平。显然,这种较低的TFP的贡献,是中国资本驱动的增长模式的特定现象。^①资本存量增长持续加速。表9显示,在经济持续超高速增长1978~2007年间,资本存量平均增长速度为11%左右,不论与哪个发展阶段相似的国家相比,这个资本积累速度都是绝对高的。2008~2018这个时期,虽然中国的潜在增长速度下降了,但是资本存量的增长速度仍然维持在11%~12%的高水平。^②资本边际收益持续递减。长期的投资依赖导致资本边际报酬递减,而且报酬递减和低增长的不良循环以及中国资本驱动模式路径依赖的低效率问题越来越明显。表9显示,1978~2007年,资本效率 (Y/K) ,即GDP与当年投资之比)为0.302,至2008~2018年,仅为0.079。

用简单的柯布——道格拉斯生产函数对中国TFP进行计算得出: ① 1978~2007年中国高峰增长期间,TFP贡献对经济增长的贡献为23.33%,细算1993年到2007年TFP对经济增长的贡献超过了35%(陆明涛等,2016),但到了2008~2018年期间,经济增长速度下滑的同时,各种计算表明TFP贡献降低至20%以下,同期主要是靠大规模刺激资本积累的方式来进行,展望未来增长,资本规模递减特征会越来越严重,不改变TFP低贡献现状,潜在经济增长率将会持续下降。

经济结构转型升级、制度机制匹配与效率路径重塑是中国跨越发展的根本所在。中共十九大后推动经济

cussions and country experiences - the most important is government intervention. For late-moving countries without a complete market system, the government may also act as a super market entity to compensate for market imperfections. (1) Industrial policy, selective financial policy and tax preferences are offered to support manufacturing. (2) Various methods such as interest rate regulation are employed to raise funds, suppress labor compensation, increase return to capital, promote investment and regional competition, and use the funds raised domestically and overseas to support manufacturing. (3) Adopt opening-up policy to expand market size and exchange rate policy to increase international competitiveness through depreciation. (4) Complete “learning by doing” through equipment importation and propel technology progress and industrial upgrade. (5) Increase GDP competition at the local level. Rapid industrialization could not have been achieved without proactive government intervention. With typical “economies of scale” characteristics, industrialization will increase efficiency and accelerate growth, thus offsetting the cost of intervention.

China’s increasingly service-based economy is also fraught with uncertainties. In particular, inconsistencies have appeared among growth, structure and efficiency. International experience also shows that the growth paths of countries diverged after economic restructuring. It requires careful understanding to elucidate uncertainties in the shift of efficiency path. We may arrive at the following conclusions based on the empirical facts of structure and efficiency:

(1) Structural and efficiency paths may not be synchronized. Based on above calculations, when an economy becomes service-based, service sector will account for a growing share yet is less efficient than industrial sectors. Rising share of service sector, therefore, is inevitably accompanied by falling productivity. This process is different from industrialization. Service-fueled growth is not synchronized with increasing return to scale and efficiency. In fact, service sector is less efficient in its scale of development compared with industrialization. This is why growth rate after service-based will decelerate when the share of service sector grows. Yet the efficiency and quality of growth will diverge. While service sector contributes to the efficiency and stability of growth for advanced economies, efficiency improvement slows and economic structure becomes more distorted for late-moving countries, making them more vulnerable to external shocks. A typical empirical fact is that efficiency path is non-continuous and diverges after an economy becomes service-based.

(2) Service-based economy tends to cause “Baumol disease” or “cost disease”. Inefficient service sector and robust demand for services lead to cost hikes, causing service price to increase relative to manufacturing price, i.e. inefficient improvement leads to price hikes that increase the cost of services. In the broad sense, cost disease is reflected as the “cost disease of urbanization”, i.e. high-cost urbanization. Yet urbanization itself does not raise the efficiency of agglomeration and innovation and, on the contrary, leads to rising cost for the society as a whole. The cost problem of cities threatens not only manufacturing sector but service upgrade as well.

(3) Uncertainties of industrial upgrade. Urbanization is a natural outcome of economic development. After urbanization rate exceeds 50%, the share of service sector will increase rapidly and the share of manufacturing sector will fall - both of them face the intrinsic requirements of industrial upgrade, i.e. industries that rely on low-cost advantage will vanish under growing cost pressures. On the other side of the coin, this process also brings opportunities of efficiency improvement arising from urban agglomeration and innovation spillover. Cost is racing against efficiency. Excess cost hike and slowing efficiency improvement are an empirical fact of China’s urbanization (Frontier Research Group, 2009). High-cost housing and public services have led to rapid “de-industrialization” in China’s urbanization process, making it less likely for producer services to improve efficiency. Having lost its strategic pillar, industrial upgrade becomes more uncertain.

(4) Uncertainties exist in the path of technology progress from “learning by doing” to indigenous innovation. “Learning by doing” is normally homogeneous technology progress and is subject to the limitation of gaps with international levels of technology; the closer the progress is to the technology

发展的基本思路也得到进一步完善,重点强调三个方面的内容,即:第一,要推动高质量发展;第二,要着力攻克发展方式、经济结构、增长动力三大关口;第三,要加快建设现代化的经济体系,强调质量第一、效率优先。因为工业化赶超的效率路径、发展机制和结构转型到了中等收入阶段似乎处于一个非常不确定的过程中,如果没有好的制度、机制推动转型升级,未能明确新的效率路径,经济增长的跨越是很难完成的,或很缓慢的探索才能实现。

工业化时期,发展经济学的“结构主义”进行了很多政策的总结,各国也做了很多实践,归纳起来最重要的就是政府的干预。在后发国家市场体系尚未建立,政府可以作为市场参与的超级主体以弥补市场的不完善性,提出了:①工业化“补贴”,利用产业政策、选择性金融政策、税收优惠政策等鼓励制造业发展;②资本积累激励,国内通过利率管制等各类方法筹集资金,压低国内劳动报酬,提升资本报酬,从而进行招商引资,并展开区域性竞争,达到国内外筹集资金用于制造业的快速发展;③开放政策,扩大市场规模,汇率政策上通过贬值提高国际竞争力等;④通过引进设备完成技术进步的“干中学”,推动国内制造业的技术进步和产业升级;⑤将GDP作为广泛的激励相容性指标,推动地方GDP的竞争。工业化的快速推进离不开政府的积极干预,工业化具有典型的“规模经济”特征,经济效率同步提升,经济结构具有加速增长和提升效率的双重作用,并足以弥补干预带来的成本。

经济结构进入服务化后隐含了很多不确定性因素,特别是增长、结构与效率同步现象出现了重大的不一致性,而国际经验更表明经济结构化后国家增长路径会出现了严重的分化,需要认真理解才能清晰地得出效率路径转换的不确定性和转换的可行路径。从结构与效率的经验事实归纳来看:

(1)结构与效率路径不同步。基于前面的计算,当经济结构服务化后,服务业比重上升很快,但其效率低于工业部门,因此服务业比重越高则一定会出现整体经济劳动生产率下降的特征。这一过程不同于工业化,服务化推动的增长不是一个“规模收益与效率递增”的同步过程,服务业的发展规模效率低于工业化,因此各国经济结构服务化后,服务业比重越高,增长普遍减速,但增长的效率和质量却出现了分化,发达国家靠服务提升经济增长的效率、稳定性,而后发国家效率改进下降,经济结构更为扭曲,易受外部冲击。一个典型的经验事实是:经济结构服务化后效率路径非连续,出现了分化。

(2)经济结构服务化的“成本病”。服务化普遍导致所谓的“鲍莫尔病”,或称为“成本病”,即由于服务业效率低,但服务需求旺,相对价格上涨,导致服务价格相对于制造业价格上升,即低效率改进导致的价格上涨,形成了服务成本上升。从广义上看是成本病更表现为“城市化成本病”,即城市化高成本推进,但城市化过程没有提升聚集和创新效率,导致整体社会普遍成本提高。城市成本问题不仅威胁制造业,也同样威胁服务业的升级。

(3)产业升级不确定。城市化是经济发展的必然产物,从国际比较看,城市化率突破50%后,服务业比重快速上升,制造业比重下降,都面临着产业升级的内在要求,即靠低成本的产业要被城市化后带来的高成本所冲击淘汰,但也包含了城市聚集和创新外溢带来的效率提升的机遇,成本与效率赛跑。中国城市化成本增长过快,效率改进下降,这是中国现在已经出现的经验事实(课题组,2009),高成本的住房、公共服务等导致中国城市化过程中有快速“去工业化”的趋势,使得服务业从生产性服务业进行效率提升的台阶逐步失去,产业

level of frontier countries, the less efficient it becomes. It is also limited by the scale of demand. Due to technological homogeneity, “learning by doing” may lead to diminishing return to scale. In the middle-income stage, technology progress from “learning by doing” becomes less efficient. However, this does not necessarily lead to an increasing share of innovation. Indigenous innovation must be supported by capital markets in order to create “monopolistic rents” for intellectual property rights. Innovation is heterogeneous. As innovations become more risky, it takes more human capital input, distributed innovation and market-based “high pricing” incentives. Yet given the uncertainties in innovation, companies and governments are more inclined to pursue technological evolution through importation and “learning by doing”. Growth based on “learning by doing” technology progress is less sustainable. Moreover, the “learning by doing” path will lead to excessive investment on technology importation that may lock up the path of technology evolution and suppress local innovation. Indigenous innovation and “learning by doing” have their respective pros and cons and may not necessarily reinforce each other. TFP remains the most important indicator. Falling TFP contribution is an indication of challenges facing technology progress. As international experience suggests, for most countries that moved from low-income stage to middle-income stage, the TFP increased rapidly in the early stage with improving contribution. Yet in the middle-income stage, their TFP declined significantly. The reason is that technology path in this stage is no longer continuous and needs to be shifted.

(5) Uncertainties in consumption upgrade. Transition towards a service-based economy requires an increasing share of human capital in consumption. Human capital must be improved in sync with structural upgrade to form dynamic efficiency compensation of consumption. This process, however, is also fraught with uncertainties. Successful transition requires service sector to be freed from excessive regulation, consumer services to improve human capital and consumption efficiency to increase.

With a service-based economy come a more sophisticated economic system, distributed innovation and incentives for high-quality human capital. Economic growth gives rise to “non-competitive” factors including institutional rules, creativity, knowledge sharing, education and information networks. The quality of these new growth factors determines whether service-based economy will propel consumption upgrade in this stage.

Structural sophistication of service sector is the foundation for China’s growth efficiency model; such sophistication is reflected in the increasingly knowledge and technology-intensive service sector. First, modern service sector contributes to overall economic efficiency. Second, a benign cycle of human capital improvement comes into play. In other words, we regard service sector as a vehicle of knowledge process and human capital accumulation rather than an auxiliary process or cost item of industrial sectors. In addition to increasing industrial efficiency, modern services are the engines of innovation and growth as well. In this sense, service efficiency must improve in sync with industrial efficiency in order for the high efficiency model to sustain.

Structural upgrade is the key to consumption and service growth. Two possible pathways exist in the growth transition towards advanced urbanization: First, low-skilled workforce continues to dominate service sector at the inertia of industrial expansion; second, service growth is supported by knowledge process. Service sector inevitably grows in size and proportion as the economy becomes service-based. Yet this process should be fueled by service and consumption upgrade. For education, entertainment and some other sectors, consumption is a process that takes time to complete. For instance, in face-to-face communication, knowledge producers create and disseminate knowledge and consumers receive knowledge. Consumers will pay according to the novelty of information stream and the level of psychological satisfaction - often with a price premium for high-quality knowledge.

In the Internet era, knowledge-intensive services have become more tradable. Not only does the Internet increase the dissemination, productivity and output of knowledge, it also makes it possible for consumers to access customized services from an ocean of redundant information.

Knowledge process must be embedded into traditional material production. This is particularly rele-

结构转型升级失去了战略支点,产业升级变得不确定。

(4)“干中学”转向“自主创新”的技术进步路径不确定。“干中学”的技术进步往往是同质性的技术进步,它首先受到本地与国际技术水平差距的限制,越接近前沿国家的技术水平,其效率越低;其次,它受到需求规模的限制,由于技术同质性特征,很容易导致“规模收益递减”。进入中等收入阶段,随着与先进技术差距缩小和需求多样性,干中学技术进步效率迅速下降,但这并不直接导致自主创新比重的提高。自主创新核心就是自主知识产权能得到“垄断租金”的激励,更要获得资本市场的激励才能完成自主创新活动。自主创新是异质性的,其创新风险不断提高,需要更多的人力资本投入和分布式创新活动,需要市场化的“高定价”激励才能完成。但由于自主创新不确定,公司和政府都愿意通过引进的方式走“干中学”的技术演进道路,消除不确定性,这无可厚非。但是一个仅仅限于“干中学”技术进步的增长,其持续性受到了限制,而且“干中学”路径会导致“过度投资”引进技术和锁定技术演进路线,压制本土创新性。自主创新和“干中学”不是一个技术路径的简单好坏的争论和自动转换,其机制建设是根本,衡量的最重要因素仍是TFP,如果TFP贡献持续下降,则认为技术进步演进出现了挑战。从国际经验比较看,从低收入阶段跃进到中等收入阶段的大多数国家在早期阶段TFP上升很快,贡献率也明显提高,但进入中等收入阶段后TFP下降明显,说明这一阶段的技术路径已经不是连续性的了,需要路径的转换。

(5)消费升级的不确定性。经济结构服务化过程中,要素服务化质量提高是关键,即以人的要素提升为核心,消费中提高广义人力资本的消费比重不断提高,提升人力质量,完成人力资本与结构升级的互动,形成所谓消费的动态效率补偿,但这一过程也是不确定的。如果服务业管制过多,消费服务没能提高人们的广义人力资本,消费效率不提升,则转型困难。

经济结构服务化意味着更复杂的经济系统协同、分布创新、高质量人力资本良性激励与循环等的出现,经济增长中“非竞争性”的新要素需要不断生产出来,包括制度规则、创意、国民知识参与分享水平、教育、信息网络等,这些新增长要素质量的不断提升决定了这一阶段服务化能否带动升级的根本。

中国经济进入高质量发展阶段的增长效率模式,是以服务业结构高级化为基础,这种高级化的重要表现之一,就是服务业越来越趋于知识技术密集,它具有两大特征,一是通过现代服务业提升整体经济的配置效率,二是人力要素的提升,用人力资本投入生产人力资本的方式服务于人,同时将人力资本不断提升。换句话说,我们把服务业作为知识过程和人力资本积累的载体来看待,而非像传统经济学理论中把服务业作为工业部门的分工辅助环节或成本项来看待。这种认识暗含的逻辑是,现代服务业一方面促进了工业更为高效率,同时现代服务业本身就成为城市化阶段的创新和增长引擎,那么服务业效率要与工业效率改进同步,否则高效率模式将难以维持。

消费和服务增长的关键不在于规模、比重,而在于结构升级,尤其是知识过程作用的发挥。在向发达城市化的增长转换时期,根据前文,可能的路径导向有两条:一条是囿于工业化规模扩张的惯性,服务业的发展以低技能的劳动力再生产为主,另一条是以知识过程为支撑的服务业的增长。经济结构服务化过程中,服务业规模扩张和比重增加是不可避免的趋势,但是推动这种状况的动力应该是服务业的结构升级,以及消费结构升级与服务业增长的联动。消费把时间资本化:诸如教育、休闲娱乐等行业的消费,已经不是传统理论上所认

vant for catch-up countries that face serious challenges to consumption upgrade.

After four decades of reform and opening-up, China has embarked upon a crucial transition from rapid growth to high-quality growth - a transition that requires supply-side structural reforms to improve productivity and efficiency, explore new growth drivers and increase TFP. The goal is to create a market-based economic system with appropriate macro regulation and vibrant micro-level entities to increase China's economic prowess and international competitiveness and pave the way for achieving the "two centennial goals".

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为的瞬时完成,与知识产品相关的消费应被看作一个过程——这是现代生产性服务业的新特征。这与知识生产消费的方式有关,“人—人”面对面交流过程中,知识生产者创造、传播知识,消费者接受、吸收知识,在市场交换的情景中,消费者根据信息流(时间上的信息发送)的新奇性支付费用。在这个过程中,消费者根据心理需求的满足程度,对不同的知识流给出自愿的支付,高水平的知识产生溢价。

消费把空间资本化。消费的迂回性,即经济服务化时代的网络化与工业化时代的网络化最大的不同,在于知识信息网络化的作用凸显。因此,发达经济城市化阶段的消费,除实现了时间的资本化外,还实现了空间的资本化,主要是借助于互联网提高知识密集型服务业的可贸易性、“人—人”面对面交流距离的拉近等。消费的这种空间资本化,一方面有利于知识流和新奇的传播扩散,提高知识生产率、扩大知识产出;另一方面有利于消费市场分割的细化,使得在信息冗余大量存在的情况下提取定制化服务成为可能,专用性的知识服务和溢价也因此被抽取出来,从而指出了现代服务业结构升级和效率提升的方向。

知识过程的发生、循环和扩展,本质上是物质生产循环向以人为载体的知识循环体系的转换。因此,循环的起点逐步从生产转向消费,通过知识消费、知识网络的互动产生高质量的知识消费服务和创新溢价。知识过程如果不能有效地融合到传统的物质生产循环之中,那么,服务业升级转型和以人为主体的知识服务循环体系也将会失去作用。特别是对于经济追赶国家而言,服务化进程中的效率模式重塑,消费结构升级将面临严重的制度挑战,把握不好就会导致转型失败,这一转变路径具有极高的结构和制度“门槛”。

整体而言,改革开放近40年来,中国经济正由高速增长阶段迈进高质量发展阶段,当前正处在转变发展方式、优化经济结构、转换增长动力的攻关期,建设现代化经济体系是跨越关口的迫切需要,也是我国经济发展的重要战略目标。因此,我们必须以供给结构性改革为主线,推动经济增长质量提升和效率提升,挖掘新的增长动力,提高全要素生产率,从而构建出市场机制有效、宏观调控有度、微观主体有活力的经济体制,提升整个国家的经济实力和国际竞争力,为实现“两个一百年”的发展目标打下坚实的基础。

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