



CHINA'S ECONOMIC REBALANCING, THE E-COMMERCE ROUTE

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Abstract China is currently experiencing a brisk digital revolution, swiftly becoming a front-runner in the Internet age. It is already enlisting the largest number of internet users globally, it is ranking first e-commerce market in the world and these developments are hastening its economic and social transformation. By improving the productive and commercial performance in various fields, by contributing to services expansion, by boosting domestic demand and consumption, e-commerce acts as new and dynamic growth engine which is supporting economic rebalancing and the redefinition of China's economic development pattern. In this article we look at China's e-commerce landscape, examining the distinctive features of this market, identifying its major growth determinants, analysing its dynamic, structure and most relevant players, as well as its organizational structures. While scanning this market, we focus on the ways in which e-commerce impacts Chinese economy, triggering its change in tune with the aims of the official economic strategies and pushing forward the country's economic growth, rebalancing and modernization.

Key words:

China, e-commerce, online trade, online market, economic rebalancing, B2B, B2C, C2C, O2O

JEL Codes:

L81, M21, O53

1. Introduction: Chinese e-commerce in a nutshell

a. E-commerce development determinants

A swift digital revolution is now under way in China. Along only one generation, this country jumped from a condition where its population was covering its basic needs exclusively on ration coupons, to one where people can get easy access to almost anything, in the largest e-commerce market of the world. By the end of 2013, China's total online sales exceeded USD 314 billion, accounting for 35% of the overall world e-commerce, outrunning by far the US (USD 255 billion sales) and coming to rank first in the global electronic trade hierarchy (Morgan Stanley, 2015). Thanks to the rapid growth of the intelligent devices in use (from 380 million to 700 million units, only between 2013-2014), China is now the country with the largest number of internet users (632 million people, or 22% of the world total) and is further ranking the largest online market worldwide, with booming sales of USD 562.7 billion forecasted for 2015 (Tables 1 and Table 2).

Table 1. Top 10 countries in the world by number of internet users in 2014

Country's position in the world hierarchy	Internet users (million people)	Internet users (% of world total)
1. China	632*	21.8
2. U.S.	269	9.2
3. India	198	6.8
4. Japan	110	3.8
5. Brazil	105	3.6
6. Russia	87	3.0
7. Indonesia	83	2.8

Country's position in the world hierarchy	Internet users (million people)	Internet users (% of world total)
8. Germany	68	2.3
9. Nigeria	67	2.3
10. U.K	57	2.0
Total (top 10 countries)	1,676	57.6%
World Total	2,900	100%

Source: Drawn up by the authors based on statistical data published by Statista (2015), available online at: www.statista.com; Note (*): or 649 million people, according to data published by National Bureau of Statistic of China (NBSC, 2015).

Table 2. Top 10 biggest markets by global e-commerce sales in 2015

Country's position in the world hierarchy	Online sales (USD billion)	Online spendings by device		
		via PCs (%)	via tablets (%)	via smartphones (%)
1. China	562.7	67.0	33.0	33.0
2. U.S.	349.1	72.0	13.0	15.0
3. U.K	93.9	71.4	12.1	16.5
4. Japan	79.3	48.0	6.0	46.0
5. Germany	74.5	72.3	11.5	16.2
6. France	42.6	80.8	8.1	11.1
7. South Korea	36.8	49.0	1.0	50.0
8. Canada	28.8	83.8	7.5	8.7
9. Russia	20.3	80.0	12.0	8.0
10. Brazil	18.8	88.0	4.0	8.0

Source: Drawn up by the authors based on statistical data published by Remarkety Platform (2015), available online at: <http://www.remarkety.com/global-e-commerce-sales-trends-and-statistics-2015#C>

This rampant online sales growth – by an average of 70% during 2008-2013 and by 25% afterwards – was possible against the backdrop of accumulated favourable circumstances and pressures, on both supply and demand sides.

Firstly, from a supply-side angle, China, which is largely known as the *world factory*, has come to manufacture „...too much of almost everything” (McKinsey & Company, 2014a), so that, especially after the outburst of the global economic crisis, its huge available supply has put tremendous pressure on producers and distributors to drastically cut prices and search for new potential markets. The new electronic trade model was promising an adequate answer to these pressures, offering important advantages to traders: (i) relatively low costs of initiating or transferring their commercial operations online; (ii) almost completely free-of-barriers online market access; (iii) increased addressability to substantially larger markets as compared to the traditional trade, including chances of penetration into remote rural areas, still completely short of commercial networks, or into various international markets; (iv) non-stop functioning of the electronic marketplaces, 24 hours a day/7 days a week; (v) increased capabilities to offer customers considerably larger and more diversified ranges of goods and services; (vi) lower inventories, deposit space and personnel needs; (vii) lower overall operating costs; (viii) improved opportunities to get feed-back from customers and adjust accordingly to their specific demand, improving marketing, advertising and other commercial techniques meant to boost trade.

Secondly, the speedy internet and transport infrastructure development of the recent two decades has also contributed to creating the necessary setting for e-commerce growth in China: while the internet coverage has quickly reached 50%, the brisk extension of the transport networks linking production sites to the Eastern coastal ports used for exports could also facilitate the expedition of the physical goods ordered online to the middle class buyers, clustered in the Eastern part of the country, too. Additionally, besides the parcel traffic covered by the state postal services, a large number of „subsistence services providers” (truck owners and drivers, for transports between towns, distributors by motor-scooters, for the „last mile” within cities) could offer extremely cheap logistic services, lowering substantially the distribution costs to the end customers. Further development of the Chinese e-commerce is strongly linked to its expansion into the rural areas, as well as to increased internet speed, extended broad-band networks, mobile internet usage, cloud computing etc., all of which imply further infrastructure investment and make clear targets in the *Internet Plus* government strategy of building the most adequate infrastructural and technological conditions

able to attract a growing number of industries towards internet and e-commerce (Salle, 2015).

Thirdly, another extremely important determinant of e-commerce development in China was *capital availability*, with local investors having seized in due time the opportunity and having shown openness to financing start-ups in this field.

On the other hand, good prerequisites for a thriving e-commerce in China have been available from a *demand-side view*. As already mentioned, an increasingly numerous middle class, with growing disposable income, growing access to internet and growing propensity to buy online has developed in China over the last decades. Moreover, according to statistics, there were over 649 million internet users in 2014 –that is 31.2 million more than in 2013 (NBSC, 2015) – and over 700 million active intelligent devices (McKinsey&Company, 2014b). Just half a year later, in June 2015, internet users had already reached 668 million, accounting for about half of China’s population and for double the population of the United States. Exceptional developments such as these have determined foreign analysts to appreciate that China’s medium-term economic rebalancing will not come that much from improved investment allocation – extremely needed, but not so easily attainable – but from further torrid advancement of the internet use and of e-commerce expansion (Salle, 2015).

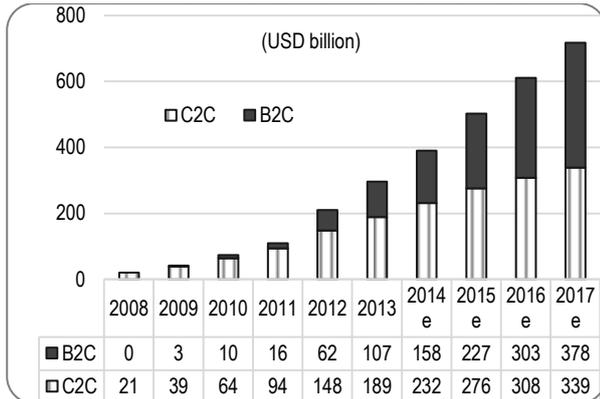
Furthermore, online commerce is very attractive not only to traders, but to consumers as well, as they enjoy: (i) lower prices; (ii) rapid and unlimited access, from the comfort of their own houses (a compelling reason for increased demand among China’s rapidly growing elder population); (iii) convenience; (iv) larger diversity of the online supply, as compared to the offline trade; (v) larger diversity of the payment methods; (vi) substantially improved information availability and more opportunities to discover other people’s views on the supplied goods and to compare offers of different sellers.

Finally, besides the dynamics and features of supply and demand, information and internet technology penetration, national infrastructure and logistics development, all of which have strongly bolstered e-commerce, *governmental approaches, policies and decisions* have completed the favourable context of this market’s alert expansion. The Chinese government has adopted two different approaches, both beneficial for e-commerce, in two distinct stages of its development: it has initially embraced a complete non-involvement attitude, letting the millions of small firms to freely develop online businesses. Later on, when the experiment proved to be a success, the national authorities have encouraged it with adequate regulation.

b. Market dynamics, structure and actors

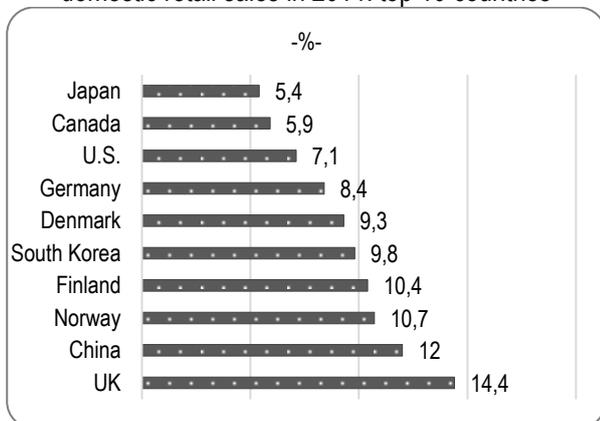
Chinese e-commerce market is peculiar in many ways: in terms of its dynamics, its size and even its structure. Not only did it grow extremely quickly (Chart 1), it became the first worldwide by size (Table 2) and the second one by its weight in the overall domestic retail (Chart 2), but in its structure the C2C (consumer-to-consumer) component still outweighs the others, fact which individualizes China among the other major e-markets in the world.

Chart 1. E-commerce market in China 2008-2017



Source: Drawn up by the authors based on statistical data published by iResearch, Analysys International, AT Kearney;

Chart 2. Retail e-commerce sales as share of total domestic retail sales in 2014: top 10 countries



Source: Drawn up by the authors based on statistical data published by eMarketer (2014);

Note: travel and event tickets are excluded

Similarly to traditional trade, e-commerce has an *engross* component, represented by B2B (business-to-business) trade, and a *retail* one, which includes the forms B2C (business-to-consumer) and C2C¹. As revealed by the data in the charts above, the C2C

component was the first developed in China and it has remained the dominant one until last year (it accounted for 100% in 2008, 64% in 2013 and about 50% of the total, in 2016), but, beyond 2016, it is expected to be gradually outbalanced by B2C.

The B2C component of e-commerce is either organised as (i) *online markets* (electronic platforms functioning similarly to the real-world malls), where the dominant leader is *Tmall* (50% of overall market sales), or as (ii) *individual traders*, who sell through their own websites, mainly to capitalize on their strong brand names (e.g. *Lenovo*, *Haier*, *Hawei*, *Xiaomi* etc.). Besides these two main online distribution systems, B2C includes (iii) the *platforms of certain specialized retailers* (e.g. *Yixun*, for electronic products) and (iv) *small online shops which operate on market niches* (e.g. *Fruitday*, for fruit, *Yesmywine* for wines, or *Mbaobao* for handbags). However, the landscape of Chinese e-commerce is not limited to the online distribution channels and their management. On the contrary, it is very complex, adding in the companies behind these channels and their intricate relations: these companies either cooperate with one another in certain activities (by establishing purposeful short-term partnerships, by using the same marketing, logistics or advertising capabilities, or even by mutually exchanging shares in their social capital), or they compete one against the other. Two rival „ecosystems” have consequently resulted from these complex interactions, clotting around the most powerful market leaders: one ecosystem has developed around the e-commerce giant *Alibaba*, including the companies *Taobao*, *Weibo*, *Tmall*, *Alipay* and *Amazon China*, while another one has evolved around the *JD-Tencent* tandem, bringing together *Paipai*, *Yixun*, *WeChat*, *58.com* and *eBay* (De Bie, 2015).

The Chinese online retail market is 40% larger than the US one, and together, the two of them account for 55% of the global e-commerce. Remarkably, China’s online retail sales have come to account for 12% of its overall domestic retail (Denver, 2015), ranking second globally, after the UK, but ahead of the US and other major e-commerce markets (Chart 2). Prospects are that this weight quickly advances to 13.5% by the end of 2016, and to 18%, in 2018 (Barron’s, 2015).

2. E-commerce, engine of economic growth and rebalancing

Internet and e-commerce are information-intensive fields. For any economy information access, data accuracy and rapid data traffic are vital prerequisites of efficient and competing action in the fiercely competitive environment of the present, where information and the way in which it is used can decide market success or failure. The more companies use these „tools” to their success, the better, both in micro and macro-economic

¹ In this paper we focus on the online sales to the final consumer, either by companies (B2C) or by individuals (C2C).

terms. Internet and e-commerce can improve company-level profitability and boost GDP. This also holds true for each of the aggregate demand components – consumption (C), investment (I), governmental expenditures (G) and net exports [exports (X) – imports (M)] – which may all be actuated by an intense e-commerce activity. Ultimately, every influence exerted upon these components is reflected in the GDP [=C + I + G + (X – M)] growth and in the overall economic development, at least through the following pathways:

Consumption (C): E-commerce may impact domestic consumption either directly, or indirectly. The direct path is the one by which e-commerce – either B2B, B2C, or both – generates (i) cost saving, improved efficiency and productivity *in the already existing companies*, which, consequently, may decide to either use their additional profits to expand operations and create new jobs, or they may choose to increase wages.

Either one of these company strategies is prone to enhancing the disposable income of the employees and their spending propensity, and to ultimately trigger domestic consumption growth. (ii) At the same time, *new e-commerce companies* can be rapidly and uncostly set up, having right from their inception the chance of launching operations not only in the domestic market, but in the entire world. Opportunities such as these have no precedent or equivalent in economic history and companies which capitalize on them generate value, earn profits and create new jobs. As they thrive, their employees may earn higher incomes, display growing demand and therefore contribute to domestic consumption boost. Due to the internet and to e-commerce, a customary way of doing business between two parts that invariably knew each other, is gradually replaced by a complex network of activities involving a much larger number of people who do not know each other directly, and probably never will, but who profitably interact in the virtual world and make a living. (iii) Finally, e-commerce enables the advent of *start-ups incompletely new activities* (electronic banking, web design, online advertising etc.) and *in related fields* (IT&C, logistics and transport, advertising, tourism and leisure etc.), also generating new jobs, increased disposable incomes, higher spending and consumption and, ultimately, a faster growth, improved quality of life and higher standards of living.

It has been demonstrated that people in China exhibit greater interest and willingness to firstly buy high-tech devices, when their disposable income grows. Such a propensity sets the stage for an increasingly larger number of internet users getting more information on the available supply and exchanging opinions on the goods and services offered both online and offline. By advertising, providing information and enabling communication and socialization among users, internet

creates demand and e-commerce caters for it. If, against the backdrop trend of disposable income growth, only a fraction of China's better paid population buys online and enjoys larger diversity, lower prices, improved quality, safety and convenience, better services and all the other benefits of e-commerce, their positive experience will generate a multiplying effect among consumers, fostering trade. As such, e-commerce not only diverts trade from the traditional system, but it also creates new demand which develops into new online and offline trade, inducing consumption growth. According to Morgan Stanley, by 2018, e-commerce will generate about 30%-40% of the overall retail sales growth in China, becoming one of the most important engines of the USD 3000 billion Chinese domestic market. This remarkable contribution to consumption growth is in tune with the targets set by the Chinese government in its strategy of changing the development model by activating new engines of economic growth, especially the domestic consumption, while diminishing the role of investments.

Investments (I): Nevertheless, e-commerce has a significant impact on the investment component of the aggregate demand, not only in quantitative or qualitative terms, but also in terms of investment allocation and efficiency. To meet keen competition and to honour the implicit and binding guarantee given to their customers that they are able to deliver the ordered goods in due time to destination and in the quantity, assortment and quality assumed, e-commerce companies need to invest both in fixed assets and inventories. In China, the most powerful online companies invest in their own logistics networks for the storage, transport and distribution of orders to the most remote places, even to places where there are no other means to supply the population with the needed essential goods. *Alibaba* and *JD* are already investing to conquer rural China. *Alibaba*, for instance, is investing RMB 10 billion (about USD 1.6 billion)² to build 1000 regional centres and 100000 village distribution units, by 2020. In June 2016 the company had already finalized 63 regional and 1803 village centres. Such projects add to the investment component of GDP boosting growth, but the most important impact of e-commerce on this GDP component might be the one reflected in *improved investment allocation* (to the information, innovation and knowledge-intensive rising industries, which employ highly-skilled people, focus on creativeness and quality), and also in the *increased efficiency* of tens of thousands companies which interact more intensely and effectively by way of B2B system, cutting costs, bottlenecks and wastage and becoming increasingly productive. Moreover, the positive impact of e-

²1USD=6.2RMB

commerce might be felt in the way businesses are run, in the advent of new business and organisational models, accelerated turnover and production cycles, better interaction and coordination among companies, leaner and more efficient value chains. At the same time, e-commerce brings companies nearer to the buyers, it helps them understand the peculiarities of demand and adjust supply accordingly. Further on, it helps involve consumers in creating and designing the goods they would like to buy.

Ultimately, in all the ways it makes its influence felt, e-commerce is playing down geography, boundaries and time, improving efficiency, productivity and value added to GDP. By its complex influence on investments, e-commerce meets the official strategic goals aiming at improved investment allocation and efficiency, comprehensive focus on creativeness, innovation and quality and a clear priority given to the development of high-tech industries, bringing, therefore, a significant contribution to China's economic rebalancing.

Government expenditures (G): The successful development of e-commerce depends on the transport and telecommunications infrastructure expansion. Furthermore, as a consequence of the growing demand for support services which it triggers, e-commerce creates additional needs for the extension and upgrading of electrical networks. Also, to secure data flows, online commercial operations and payments, new regulation and organizational systems are required, as well as public expenditures on facilities and specialized personnel. In other words, to reveal its benefits, e-commerce needs besides private investments, management and skills - an enabling economic environment, with favourable rules, but also significant public expenditures, which are reflected in the evolution of GDP.

Net exports (X-M): E-commerce creates for all the online-operating companies the opportunity to easily, rapidly and rather cheaply enter the entire world market, encouraging them to get involved in import and export operations. Even the smallest companies get instant direct access to the consumers all over the world and benefit from certain support services (online payments, online advertising, logistics etc.) having the chance of turning into a kind of „micro-multinational companies”, which sell to foreign customers, in B2B Chinese markets and/or on foreign online platforms (McKinsey, 2014b). As actors in the international online markets, Chinese companies compete with firms from every corner of the world; get in contact with various marketing and advertising methods and techniques, with the peculiarities of international expedition and transport industry and with the specific demand of different markets. They also have the opportunity to launch and advance their own brand names. All these experiences in the global market trigger learning

processes and help companies adjust, which, in principle, leads to improved competitiveness, larger exports, profits and contribution to GDP growth. Naturally, Chinese leaders hope to use every channel, the e-commerce channels included, to increase exports and destock the economy, and, to this end, they stimulate online companies to penetrate foreign markets by granting subsidies, tax reductions, guarantees etc. (Reuters, 2015a). Enlarged net exports may save production capacities and jobs while increasing GDP, and therefore, even if they are no longer the main driver of economic growth, exports and foreign demand remain important for China.

3. Summing-up and prospects

It is beyond any doubt that in the coming years digital revolution will go on forcefully in China and that e-commerce will strive further. Jack Ma, the founder of *Alibaba*, forecasts that over only one decade, 50% of the domestic consumption in China will be catered for by e-commerce (Reuters, 2015b). Structurally, B2B and B2C, which will develop faster, will outrun C2C and become the dominant e-commerce types, the more so as buyers will incline to gradually migrate from C2C to B2B, once they get experience and trust in the system and start wishing for goods and services of better quality. At the same time, new e-commerce models are expected to appear, some of them combining online and offline trade versions (O2O), which, according to some recent market research papers, are prone to becoming trend-changers in China (Lau *et al.*, 2015). It seems that Chinese consumers would like O2O extended from its present use (for buying travel tickets, making restaurant reservations etc.) to other services (healthcare, entertainment, house and car attendance etc.) and even to very expensive purchases, as for instance of cars³. Also, another potential structural development of e-commerce could be the advent of the C2B version.

E-commerce growth in China is expected to be mainly nourished by (i) its extension to the smaller towns (tier-3 to 6 cities), (ii) to the hundreds of thousands villages in the rural area, as well as (iii) to the international digital market place. (i) As regards the digital shopping extension in urban China, Morgan Stanley (2015) finds out that in the first half of 2014, 58% of the online orders which had been made by smartphones came from some of the smallest towns, while a

³On Bachelors' Day (11.11/Nov. 11), a day of discount similar to Black Friday, 150 000 cars were sold online, showing Chinese buyers' comfort with using O2O for big value purchases (Lau *et al.*, 2015).

Bain&Company study forecasts that, by 2018, half the total online sales will come from tier-3 cities or below (Forbes, 2015). (ii) Regarding digital shoppers in rural China, these are, at present, three times fewer than in the cities, but they are multiplying much faster (by 41%, as compared to 17%, in 2014) (Wong=&Chao, 2015). (iii) As to cross-border online sales, their total amount of USD 3.3 billion in 2013 more than doubled in 2014, stimulated by the new regulation on international payments and by other encouraging steps taken by the government (public support to the online retail export companies, fiscal incentives, credit insurance services, streamlined customs clearance etc.), a trend which is going to carry on (Reuters, 2015a). On the other hand, the elder population's demand is expected to become a very important e-commerce growth engine, as elders are not only increasingly numerous in China, but also increasingly interested in taking advantage of the digital shopping benefits, in terms of convenience and cost. Indeed, according to *Alibaba Shopping Price Index*, there is a clear downward trend in e-commerce prices, which is prone to actuate online shopping in China and, further on, to give a boost to domestic consumption, helping it bolster its newly gained role of main economic growth driving force in the new development model (Barron's, 2014). Additional boost is expected to be provided by the further growth of mobile communications coverage, the increasingly larger usage of smart communication devices and the consistent improvement of security, both in terms of digital payments and deliveries themselves (fighting fake transactions, counterfeit goods and illegal import).

4. Conclusions

E-commerce has already triggered a „revolution“ in China's economy, by hastening the shift from a manufacture-dominated, export-oriented and still too tightly state-guided economic structure, to one driven by services and domestic consumption, where companies, irrespective of their size, may enjoy free access to both local and foreign digital marketplaces and customers. Both the internet and e-commerce will further have a complex and powerful bearing on each aggregate demand component, generating echoes and chain effects throughout the Chinese economy and society, helping the economy rebalance and the country's development model be redefined.

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