C2 Newsletter

Winter 2017

EU-CHINA
Social Protection Reform Project
中国-欧盟社会保障改革项目

FROM THE
RESIDENT EXPERT, COMPONENT 2

During the third year of the project, Component 2 almost completed all the activities planned, ensuring the high quality of the research papers and training activities.

The 2017 goals will be finally reached with a Workshop on the research topics, to be held in Beijing, on February 2018. The C2 is considering transforming the long reports that have been produced up to now in a coherent, easily to consult material that could be useful both to Chinese officials and scholars of Chinese socio-economic problems.

Moreover, the component is launching an initiative connected with the newsletter, the creation of a Weibo account，whose address will be shortly sent to our readers.

The goal is to involve the readers of the Project newsletters to share their comments, ideas, suggestions and policy proposals specially on the basis of the information provided by the "statistic corner", as well as by other documents and papers that will be uploaded also following the indications coming from the readers.

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1. PANEL DISCUSSION- Investment strategies of social insurance funds and risk control methodologies

On 21st November 2017, the EU-China Social Protection Reform Project - Component 2 held a Panel Discussion on the topic "Investment strategies of social insurance funds and risk control methodologies", in cooperation with the Social Security Department of the Ministry of Finance.
The Panel was co-chaired by Mr. Di Donghui (Division Director, Actuarial Division, Social Security Department, MoF) and Mr. Massimo Antichi (EU-China SPRP, Project Leader, Italian Institute of Social Protection).
The issue of investment strategies of social security funds and risk control methodologies was part of the policy agenda of the 18th Party Congress and by now the Chinese government is facing numerous challenges related to this issue. The topic is also very high in the agenda of the Ministry of Finance that is facing the problem of guaranteeing the financial sustainability of the Chinese pension system.

The panel discussion gathered EU and Chinese experts to discuss how to improve the investment strategies of pension funds and reach a more efficient level of risk management.
The morning session was devoted to the presentation of the Chinese context and background by Prof. Hu Jiye. Then Mr. Davide Cipparrone, Mangusta Risk Ltd, discussed the management of pension fund portfolio, touching upon such themes as the concepts of risk and risk premium, diversification, allocation and governance.
In the afternoon session, Mr. Andrea Canavesio, Mangusta Risk Ltd, presented the pension funds system in Italy, the market structure in which it operates, the existing regulation and methods of supervision.

The round table that concluded the event provided the occasion for a lively discussion between the Chinese experts present at the meeting, government officials and the authors of the papers about the main issues raised by the presentations.
Around 20 participants, including representatives from the Social Security Department of the Ministry of Finance, professors of the University of International Business and Economics; Renmin University; China University of Political Science and Law; China Institute of Finance and Capital Market; China Securities Regulatory Commission; and the project team took part in the Panel.

2. DRAFTING THE 2018 ACTIVITY PLAN in cooperation with MoF

Since last October, the Component 2 worked in close cooperation with the Social Security Department of the Ministry of Finance to draw the 2018 C2 activity plan, that was included in the "Aide Memoire", a document that will be formally approved by the Project Advisory Committee (PAC) Meeting, to be held in Beijing, on 6th February 2018.

Here we just recall that in order to complete the 2017 activities, the Component 2 will organize in Beijing, on 26 and 27 February, a workshop aimed at presenting and discussing the policy suggestions related to the following topics:
- ✓ *An integrated system for the coordinated management of the social assistance system*
- ✓ *Development of Old-age Services and Long-Term Care System*
- ✓ *Investment strategies of social funds and risk control methodologies*

On the other hand, the 2018 activities will focus on three different relevant topics:
- ✓ *Alternative policy measures to cope with the impact of ageing on the financial sustainability of the social security system*
- ✓ *Social contribution collections: toward a unified*
- ✓ *The role of public finance in subsidizing the social security system*

The understanding of some of the most important themes for the Chinese Social Security System nowadays a will be pursued with three research projects titled:
- ➢ **Long term care for the elderly. occupational profiles, gender segmentation and training programs**
- ➢ **China's fiscal, economic, and demographic imbalances at the provincial level**
- ➢ **The sustainability of the welfare system: the methodological approach of the EU aging commission and other international organization**

The first research will be entrusted to a EU expert and the others to Chinese experts.
Finally, the component 2 will carry out the usual two-week training activity for around 15 officials of the Ministry of Finance and we are very happy that the chosen country is again Italy.

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3. PROJECT COORDINATION MEETING, ROME

On December 1st, 2017, the Project held a Coordination Meeting of the EU-China SPR Project in Rome. The meeting was chaired by the Project Leader Mr. Massimo Antichi and was attended by officials of the Ministry of Finance and of the Ministry of Civil Affairs, Consortium representatives, representatives of the French and Italian Secretariats, the Component coordinators and the Resident experts.

The Components shared the results of the activities performed in 2017 and the proposals for the 2018 Activity Plan. The Chinese Beneficiaries expressed very positive comments about the Project activity so far and how it is helpful for the Chinese policy makers.

Finally, all the participants discussed on the possibility to use the residual budget of the Project for prolonging the Project.

3. VISIT TO THE ELDERLY CARE CENTERS CUNCAO CHUNHUI HOME FOR THE AGED and SHOUKAI CUNCAO HOME FOR THE AGED

On December 7th, 2017 members of the C2 project visited, under the guidance of Prof. Li Zhen (Renmin University), two elderly care centers in Beijing. The visit was conducted in preparation of the policy recommendation report addressing the topic "development of elderly care services and long-term care system".

The Cuncao Chunhui Home for the Aged (寸草春晖养老院), built in 2011 in Hepingli (Beijing, Dongcheng District) under the leadership of the Ministry of Civil Affairs Bureau and of the Chaoyang District Bureau, is one of the pioneer institutios of this kind. The center that employs professional nursing staff focuses on the elderly, the disabled, and the semi-disabled elderly with dementia. It provides high quality services including daily activities support, medical treatment, nursing care, etc. The center can fit up to 100 beds, in double rooms. The staff assists each patient by providing daily services and care in a homely environment. The center does also provide community care, by Apps or dedicated service.

During the visit, Mr. Li Dong Feng introduced a new software recently produced by his company, iHomeCarer, which provides a set of services for the elderly care. Through the platform contained in a small and easy-to-use device, the elderly can access from his home a series of standard services.

The software is connected to an APP, which can be used also by the son/daughter of the elderly. Through the device the elderly can easily and comfortably buy food, order a meal, get an appointment with a clinic, fix an appointment with the elderly care provider, order medicines, etc. The device can storage all the daily activities performed, and most importantly the list of the medicines that have been taken, the health checks, and can if needed signal an alarm. Up to now, the product is still in a testing stage, but once fully tested it will be launched on a large scale.

The group then visited the residential institute Shoukai Cuncao Home for the Aged 首开寸草养老护理, which represents a good example of residential elderly care center. The institute was built in 2017, it offers high standard services in a comfortable and quiet environment, in a newly decorated building featuring up to 50 beds in single rooms. According to the degree of disability, the guests are distributed on the three floors of the institute, where 24 hours nursing care assistance is guaranteed. The fee of this type of institute is higher than that of the Cuncao Chunhui Home for the Aged.

3. RECENT POLICY DEVELOPMENT IN SOCIAL PROTECTION AND RELATED FIELDS

Sep 2017
According to MOCA, senior care institutions registered in China are about 28,000, with 7 million senior care beds. Among them, 12,500 are private institutions, with Year-on-Year increase of 7.8%. The numbers of community-based and mutual senior care facilities are respectively 38,000 and 78,000.

http://www.gov.cn/xinwen/2018-01/02/content_5252684.htm

Nov 2017
China and Luxembourg signed a bilateral agreement on social security. Previously, China has signed similar agreements with Germany, Korea, Denmark, Finland, Canada, Switzerland, Netherlands, France and Spain.

http://www.gov.cn/xinwen/2017-11/27/content_5242624.htm

Dec 2017

In 2017, the number of Chinese people covered by the basic old-age, basic medical, unemployment, work-related injury, and maternity insurances is respectively 915 million, 117.7 million, 188 million, 227 million and 192 million. The contributions paid to these five programs are totally ¥6.64 trillion, with Year-on-Year increase of 23.9%; and the total expenditure is ¥5.69 trillion, with Year-on-Year increase of 21.4%.
http://www.gov.cn/xinwen/2018-01/27/content_5261231.htm

China has created jobs for 11.91 million people in urban areas for the first 10 months of 2017, the Ministry of Human Resources and Social Security announced on Dec 7. Also during the same period, 4.71 million of the urban population who were previously jobless managed to get jobs, and 1.47 million people who had difficulty in finding employment are employed.
Therefore, 2017 target creating new jobs for 11 million urban residents -set in the Government Work Report in March- has been reached ahead of time.
http://english.gov.cn/policies/policywatch/

According to new policy, Hong Kong and Macau citizens working in Mainland China can enjoy the same rights of housing credit as other mainland residents in accordance with the Regulation on Housing Credit.
http://www.gov.cn/xinwen/2017-12/18/content_5248317.htm

Jan 2018

9 provinces, including Beijing and Anhui, have signed the entrusted contracts for basic old-age insurance funds, totally ¥430 billion; and Jiangsu, Zhejiang, Gansu and Tibet have approved the investment plans.
http://www.gov.cn/xinwen/2018-01/27/content_5261231.htm

Provinces like Sichuan and Anhui fully open the market of senior care. In Yunnan, social organizations can get loans of maximum ¥2 billion per program for developing senior care centres. The city of Chongqing plans to build up 1000 community-based senior care stations in 3 years.
http://www.gov.cn/xinwen/2018-01/24/content_5259983.htm

Shanghai conducts pilot of Long Term Care insurance since January 1, which covers every district of the city with the expectation to provide services for over 3 million aged persons in 2018.
http://www.gov.cn/xinwen/2017-12/29/content_5251520.htm

According to a guideline regarding the construction of "Internet Plus government services" issued by the State Council, more efforts should be made to facilitate the innovation of online public services and all-around application of high-tech approaches in each sphere of government affairs, in a bid to bring convenience to the masses, People's Daily reported on Jan 4.
http://english.gov.cn/policies/policy_watch/2018/01/05/content_281476002590296.htm

Feb 2018

The Measure of Enterprise Annuity (second pillar), jointly issued by MOHRSS and MOF in 2016, comes into force on February 1, 2018.
http://www.gov.cn/xinwen/2017-12/22/content_5249399.htm

Zhongzhong and Huahua are the first two monkey clones created in Shanghai by the Institute of Neuroscience using the same technique behind Dolly the sheep. For the past decade, Mu-Ming Poo, the director of the institute, has been on a quest to make monkeys that can be used to study human disease.
https://www.theatlantic.com/science/archive/2018/01/china-monkey-clones-zhongzhong-huahua/

Zhongzhong, a monkey clone

4. THE STATISTICS CORNER

Introduction - In the statistical corner of the autumn C2 Newsletter, it was pointed out that the 65 countries belonging to the Belt and Road Initiative (BRI) will be affected by different demographic trends. Our main interest is that of understanding the impact of such trends on the labor market of the BRI countries, their implications for the sustainability of the welfare systems as well as the existence of demographic complementarities that, if correctly exploited, could become an important asset of the Initiative. We will therefore concentrate not only on ageing as such, but on the evolution of the population structure.

Moreover, a basic tenant of this analysis is that population is not an exogenous variable whose future values can be forecast on the basis of independent assumptions on fertility, mortality ad migration; the implication is that population trends depends on the interaction between the demographic and economic spheres. The analysis will therefore be based on the zero migration scenario produced by the United Nations Population Division.

The phases of the demographic transition - The BRI countries present different demographic parameters, their demographic situation is expected to differ in any specific future moment, while following the same general pattern. This is due to the fact they are all affected by a complex process known as the demographic transition (DT). The inception of this process is determined by the socioeconomic and cultural development reached by a country; therefore, different countries entered the DT in different moments of time and at present are located in different phases of the process.

To better understand the impact of the DT in absence of migration, it can be useful to point out its three phases (Table 1):

1. In the first, the death rate declines mainly as a consequence of the decline in infant and child mortality, while the birth rate remains at the original level; therefore the share of young people increases, while the total population increases at an increasing rate;

2. In the second phase the rate of birth starts to decline progressively converging toward the rate of mortality; therefore, total population continues to increase, but at a decreasing rate; due to the arrival of cohorts of increasing size, the share of working age population (WAP) increases, while the share of young declines; it is at the end of this phase that the aging process starts.

3. The third phase begins when the birth rate falls below the death rate; this implies a decline in total population and an increase in the share of the elderly, while the shares of WAP and of the young decline.

Table 1 - The phases of the demographic transition

	First phase	Second phase	Third phase
Mortality rate	Declines rapidly	Declines	Increases
Birth rate	Remains constant	Declines and converge toward the mortality rate	Not defined
Natural rate of growth	Increases	Declines	Becomes negative and its absolute value increases
Share of young people	Increases	Declines	Continue to decline
Shared of working age population	Declines	Increases	Declines
Share of elderly	Declines	Start to increase at the end of the phase	Increases at an increasing rate

Groups of countries - From the WAP perspective the 65 countries of the BRI can be classified into three groups. In the first group, the most advanced along the path of the demographic transition, WAP will decline in both the periods we are considering (2015-2030, and 2030-2060). This group is epitomized by China. In a second group of countries WAP is expected to increase in the first period and decline in the second. Finally, in a third group WAP will increase in both periods. This group is well represented by the second demographic giant of the BRI, India. The first group includes 25 countries, the second 14, and the third 26.

The 25 countries of the first group are those that have been affected by the demographic transition for a longer period or in which the demographic transition has proceeded at higher speed. In all of them the TFR is well below the replacement level of 2.1 children per woman, and is not projected to be back to replacement level by 2060. In 2015 the average TFR of the group was 1.53. In spite of common demographic features, these countries do largely differ with respect to geographical position, size, and religion. Five of them are Asian countries, the other 20 are in Easter, Northern and Southern Europe. The group includes countries whose population is predominantly Buddhist, Muslim, Catholic, Orthodox and Protestant. Finally, while China is the most populous country in the world and Russia has about 144 million inhabitants, the population of 6 countries of this group is

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included between 5 and 10 million, that of 11 between 1 and 5 million, while in one the population is less than 1 million.

The second group is the smallest, its population accounting for less than 6% of total BRI population. Generally speaking and as a group, these countries are lagging behind the countries of the first group on the path of the DT. The average level of their TFR is 2.1 with the national levels being just above or just below the replacement level. This group includes 6 South and South-eastern Asian countries and 8 Western Asian countries including six Arab states that border the Persian Gulf (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE)). The two largest countries are Iran and Vietnam, followed by Saudi Arabia. All the countries of this group, but Bhutan, are Muslim countries.

The third group is the largest both by number of countries (26) and total population size (54.9% of 2015 total BRI population). The countries of this group are those in which the DT is less advanced; the average TFR is 3.21 children per woman, but values range from a maximum of 5.9 registered in Timor Leste and a minimum of 2.1 registered in Sri Lanka. All the countries of this group are in Asia, but Egypt. Also in this case the full range of main religious beliefs are represented, but differently from the other groups, the third group includes some of the most populous countries on the planet. In fact, beside India, there are other 5 countries (Indonesia, Pakistan, Bangladesh, Philippines, Egypt) whose population already is or shortly will be in excess of 100 million; together with India these 5 countries account for more than 80 per cent of the total population of the group and of each major age group.

The demographic trends of the three groups - We will start our analysis from the group level and in the two periods separately. This will allow to fully appreciate how the DT process is going to progressively impact on the three groups of countries (Table 2).

In the first period we can observe that:

Total population - the rate of growth of total population increases moving from the first to the third group: the first group is projected to register a marginal increase (+2%), the second to increase by 14.6%, and the third by 19.6%. Given the different size of the three groups, the increase registered by the third (494 million) accounts for 86.6% of the total, while those of the first (36 million) and of the second (40 million) account respectively for 6.4% and 7%;

Young people - the rates of growth of the young people present the opposite ranking: that of the first group is expected to decline by 9.7%, that of the second by 3.3 %, while that of the third will remain substantially constant;

Working age population - The WAP of first group will decline by 5.2% (-67 million); that of the second will increase by 12.5% (40 million) and that of the third by 23.9% (391 million). In conclusion the increase in WAP registered by the BRI countries is almost completely concentrated in the third group of countries.

The elderly - the number of elderly will increase in all three groups; in this case 53% of the additional elderly of the BRI countries will be in the first group, 7% in the second and 40% in the third.

Table 2 - Population by main age group in the BRI and in three groups of countries; absolute value in 2015, 2030 and 2060; absolute change and percentage change in the periods 2015-2030 and 2030-2060; absolute values and absolute changes in million.

	Total				First group			
	0-14	15-64	65+	Total	0-14	15-64	65+	Total
	Absolute values							
2015	1,135	3,125	342	4,601	313	1,296	192	1,802
2030	1,104	3,474	594	5,172	283	1,229	326	1,838
2060	973	3,485	1,134	5,591	233	924	492	1,649
	Abasolute change							
2015-30	-31	348	253	571	-30	-67	134	36
2030-60	-131	11	539	420	-50	-306	166	-189
2015-60	-162	360	792	990	-80	-372	299	-153
	Percentage change							
2015-30	-2.7	11.1	74.0	12.4	-9.7	-5.2	69.4	2.0
2030-60	-11.9	0.3	90.8	8.1	-17.5	-24.9	50.8	-10.3
2015-60	-14.3	11.5	232.0	21.5	-25.5	-28.7	155.5	-8.5
	Second groupl				Thirdt group			
	0-14	15-64	65+	Total	0-14	15-64	65+	Total
	Absolute values							
2015	64	195	15	273	757	1,634	135	2,526
2030	62	219	32	313	759	2,025	236	3,020
2060	52	195	91	338	687	2,366	551	3,605
	Abasolute change							
2015-30	-2	24	18	40	2	391	102	494
2030-60	-9	-25	59	25	-72	342	315	584
2015-60	-12	0	76	65	-70	733	417	1079
	Percentage change							
2015-30	-3.3	12.5	121.4	14.6	0.2	23.9	75.6	19.6
2030-60	-15.3	-11.3	183.2	7.8	-9.5	16.9	133.3	19.4
2015-60	-18.2	-0.2	526.9	23.6	-9.3	44.8	309.7	42.7

Moving to the second period (2030-2060) we can observe that:

Total population - total population will decline only in the first group of countries (-10.5%), it will increase by

7.8 per cent in the second group and by 19.4% in the third;

Young people - the young people will decline in all three groups the decrease being progressively less pronounced moving from the first group -17.5% (- 50 million) to the second -15.3% (- 9 million), to the third -9.5% (- 72 million);

Working age population - WAP is projected to decline in the 39 countries that compose the first and second group; in the first group the expected decline is equal to 306 million, almost 1/4 of 2030 level, while in second group the absolute decline is just 25 million which however represent 11.3% of the initial value; in the third group WAP will increase by 342 million (16.9%): the increase in the third group is just sufficient to offset the decline in the first two groups;

The elderly - the elderly will increase in all three groups:166 million (50.8%) in the first, 59 million (183.2%) in the second, and 355 million (133%) in the third so that in the BRI countries taken together the number of elderly will increase from 2015 to 2060 by 792 million.

The population structure by main age groups - The trends we have just outlined will obviously cause dramatic changes in the population structure that will reflect the progression of the demographic transition on each group of countries, while the relative position of each group will remain the same, since it is determined, as we have already underlined, by the moment in which the DT began.

Figure 1 show that the share of the young people will progressively decline in each group, the share of the elderly will progressively increase, while the ranking of the three groups will remain the same. In the first and second group the share of WAP, will register a very consistent decline since the countries belonging to them are already or in the third phase of the DT or at the end of the second phase; in the third group, whose countries are on the average still in the initial phase of the DT, the share of WAP increases.
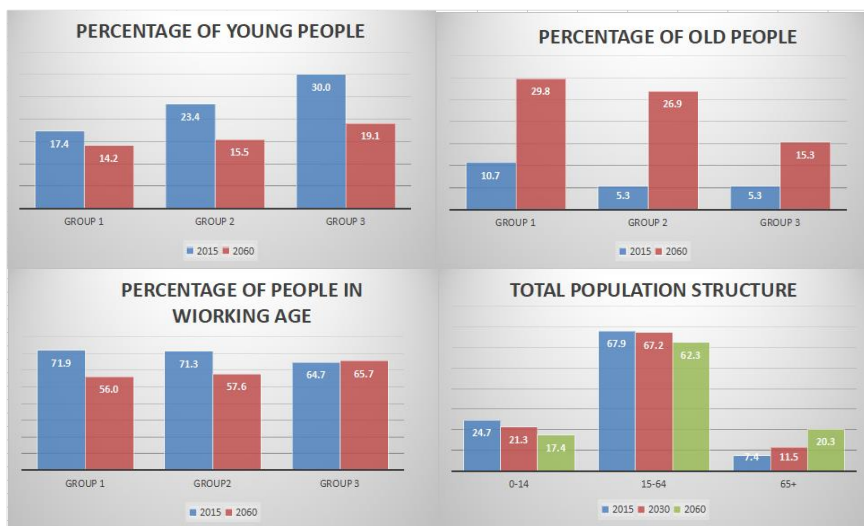
In conclusion over the 2015-2060 period, in absence of migration, the total population of the BRI countries, is projected to increase by almost 1 billion (21.5 per cent). From the age group perspective this is the result of a decline of the young by 162 million (-14.3%), an increase of WAP by 360 million (+11.5%) and of the elderly by 792 million (232%), As a consequence: the percentage of the young will notably decline (from 24.7% to 17.4 %) that of the elderly notably increase (from 7.4% to 20.3%), while also the share of WAP will lose 5.6 percentage points.

From the perspective of the three groups we are considering, the increase of the total population is the result of a decline registered by the first group, a small increase registered by the second and of a huge increase (1.07 billion) registered by the third. As a consequence, the demographic weight of the first group will decline by almost ten percentage points that will be gained by the third, while the share of the second will remain substantially unchanged (Figure 2).

Figure 2 - BRI groups of countries; share of total population in 2015, 2030 and 2060
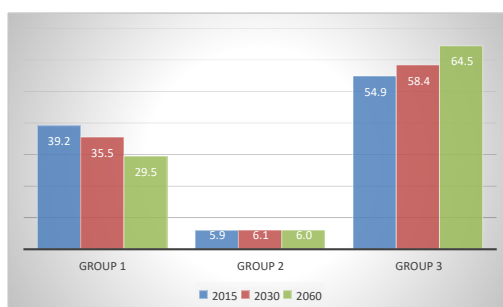
The national level - The previous data clearly suggest that aging is going to be a phenomenon that will invest all the countries of the the BRI, spreading from those more advanced along the path of the demographic transition to those that are just at the beginning of this process.

While Figure 3 (that reports the ranking of the percentage of elderly in the 65 countries of the BRI in 2015, 2030 and 2060) allows to have a detailed vision of the problem, some summary data are sufficient to understand the magnitude and pervasiveness of the process.

In 2015 in only one country the percentage of elderly was above 20% (Bulgaria) and in 40 was below 10%. In 2030 16 countries are projected to register values over 20% and the number of countries with values below 10% will drop to 31. In 2060 in two countries the percentage will be just around 50% (that is half of the population will be old), in 15 it will be between 30% and 40%, in 25 between 20% and 30%, in 19 between 10% and 20% and only in 5 below 10%. Moreover, while by now the ranking is led by European countries with Singapore and Thailand still preceding China, in 2060 the ranking will be led by the Gulf States with Singapore in the third place.

These data are obviously extremely shocking, and they are raising a deep and growing concern in relation to the financial sustainability of the pension system and of the long-term care system. However equally or even more worrying should be trend of WAP, that is of the source of human resources that will responsible for production, economic growth and the provision of services for the elderly.

In this perspective it is important to remember that aging is a relative phenomenon. The absolute numbers of elderly is important to understand the size of the problem to be faced, but the increase in the percentage of elderly is not only the result of more people above 65, but also of less people below that age limit.

As we have seen in the next 13 years 25 countries will witness a notable decline in WAP and other 14 will join them in the following 30 years. At the same time, between 2015 and 2030 the WAP balance of the BRI countries will be largely positive since the decline of the first group will be largely offset by the increase in the third; however, in the following period the total population in working age of the BRI will remain substantially stable since the decline of the first group will become larger, WAP will decline in other 14 countries and the growth of WAP in the third group will notably diminish. As a matter of fact a closer look would show that around the middle of the century the total WAP of BRI countries will be decreasing .

Table 3 BRI countries; percentage of elderly; ranking of national values in 2015, 2030, and 2060

2015		2030		2060	
Bulgaria	20.1	Slovenia	25.9	Qatar	50.2
Latvia	19.3	Singapore	24.5	United Arab Emirates	49.3
Croatia	18.9	Croatia	24.3	Singapore	39.4
Estonia	18.8	Estonia	23.2	Poland	35.2
Lithuania	18.7	Bulgaria	23.2	Slovenia	33.6
Slovenia	18.0	Poland	23.1	Oman	33.1
Czechia	18.0	Czechia	23.0	Bahrain	33.1
Hungary	17.5	Lithuania	22.8	Czechia	32.6
Romania	17.0	B&H	22.8	Slovakia	31.6
Serbia	16.3	Latvia	22.6	B&H	31.5
Ukraine	15.9	Hungary	22.2	Croatia	31.4
B&H	15.7	Slovakia	20.9	Thailand	30.9
Poland	15.6	Romania	20.7	Hungary	30.9
Georgia	14.6	Serbia	20.4	Maldives	30.8
Belarus	14.3	Ukraine	20.3	Moldova	30.3
Slovakia	14.1	Montenegro	20.0	China	30.2
Montenegro	13.9	Belarus	19.8	Estonia	30.0
Russia	13.5	Albania	19.6	Iran	29.8
Albania	12.5	Russia	19.6	Romania	29.1
TFYR Macedonia	12.5	Thailand	19.5	Bulgaria	28.7
Singapore	11.7	Georgia	18.1	TFYR Macedonia	28.5
Israel	11.2	TFYR Macedonia	18.1	Albania	28.3
Armenia	10.9	Moldova	17.1	Latvia	28.2
Thailand	10.6	China	17.0	Montenegro	27.6
Moldova	9.9	Armenia	16.9	Ukraine	27.5
China	9.7	Sri Lanka	14.7	Armenia	27.4
Sri Lanka	9.3	Israel	14.0	Kuwait	26.7
Lebanon	8.1	Vietnam	12.3	Lithuania	26.7
Turkey	7.8	Turkey	12.1	Brunei Darussalam	26.3
Kazakhstan	6.8	Lebanon	12.1	Serbia	26.3
Vietnam	6.7	Azerbaijan	11.7	Belarus	26.3
Malaysia	5.9	Brunei Darussalam	10.4	Lebanon	26.1
Azerbaijan	5.7	Kazakhstan	10.4	Vietnam	25.8
India	5.6	Malaysia	9.8	Russia	24.6
Nepal	5.5	Iran	9.8	Turkey	23.6
Myanmar	5.3	Myanmar	8.6	Georgia	22.9
Indonesia	5.1	India	8.4	Bhutan	22.8
Bangladesh	5.0	Bahrain	8.3	Malaysia	22.8
Iran	5.0	Indonesia	8.2	Saudi Arabia	22.1
Bhutan	4.7	Kuwait	8.0	Azerbaijan	21.7
Philippines	4.6	Uzbekistan	7.9	Sri Lanka	21.6
Pakistan	4.5	Bangladesh	7.6	Bangladesh	21.0
Kyrgyzstan	4.3	Kyrgyzstan	7.6	Israel	18.8
Uzbekistan	4.2	Maldives	7.5	Uzbekistan	17.8
Cambodia	4.1	Bhutan	7.4	India	16.5
Maldives	4.1	Saudi Arabia	7.2	Nepal	16.3
Brunei Darussalam	4.1	Nepal	7.1	Kazakhstan	16.0
Turkmenistan	4.1	Turkmenistan	7.0	Cambodia	15.5
Syria	4.0	Mongolia	7.0	Indonesia	15.5
Laos	3.9	United Arab Emirat	6.9	Mongolia	15.1
Mongolia	3.9	Philippines	6.7	Myanmar	14.9
Jordan	3.8	Cambodia	6.6	Laos	14.1
Timor	3.5	Qatar	6.5	Kyrgyzstan	13.6
Tajikistan	3.3	Syria	6.4	Syria	13.4
Iraq	3.1	Oman	5.8	Turkmenistan	13.3
Saudi Arabia	3.1	Tajikistan	5.6	Jordan	13.0
State of Palestine	3.0	Pakistan	5.5	Philippines	11.9
Yemen	2.9	Laos	5.4	Tajikistan	11.7
Afghanistan	2.5	Jordan	5.3	Pakistan	10.8
Bahrain	2.3	State of Palestine	4.0	State of Palestine	9.7
Oman	2.3	Timor	3.8	Yemen	8.9
Kuwait	2.1	Iraq	3.6	Afghanistan	7.6
Qatar	1.1	Yemen	3.4	Iraq	7.3
UAE	1.0	Afghanistan	3.1	Timor	6.1

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Given the extremely different size of the 65 countries of the BRI the absolute change of WAP is dominated by a few countries. On the negative side, and over the 2015-2060 period, the major role is obviously played by China, followed by Russia, Thailand, Ukraine and Poland, while the other countries all together account for a decline of around 48 million. On the positive side the dominant role is played by India; however other 9 countries (Pakistan, Egypt, Indonesia, Philippine, Iraq, Bangladesh, Afghanistan, Yemen and Syria) will register a change in WAP in excess of 10 million.

Table 4 – Total absolute change of WAP in the large countries of the first and second group; 2015-2030, 2030-2060, and 2015-2060

	2015-30	2030-60	2015-60		2015-30	2030-60	2015-60
China	-36.8	-246.8	-283.6	India	174.0	89.5	263.5
Russia	-12.7	-16.1	-28.8	Pakistan	43.9	68.3	112.2
Thailand	-2.9	-12.1	-15.0	Egypt	19.2	33.8	53.0
Ukraine	-4.1	-6.9	-11.1	Indonesia	30.7	15.5	46.3
Poland	-3.0	-7.5	-10.5	Philippines	18.3	27.9	46.2
Others	-7.4	-40.8	-48.3	Iraq	11.3	29.2	40.6
Total	-66.9	-330.3	-397.2	Bangladesh	28.1	5.3	33.4
				Afghanistan	11.7	20.6	32.4
				Yemen	8.2	13.5	21.7
				Syria	5.1	6.6	11.6
				Others	40.3	31.5	71.7
				Total	390.8	341.8	732.6

However from a labour market perspective it is more relevant to consider the percentage change. Starting from group 1, in the first period 14 countries register a decline of WAP in excess of 10% and the only Asian country in this group is Singapore (-10.3%). Thailand ranks 20th, China 23rd (-5.6%) (Table 5). In the second period the changes become more relevant for many countries, especially those in Asia, even considering that the period lasts the double. In this ranking Singapore is now second (-33.2%), Thailand 7th (-26.2%) and China 12th (-25.2%). If we consider the 2015-2060 period we can see that the WAP of Singapore is projected to decline with respect to 2015 by 39.1%, that of Thailand by 30.6 % and that of China by 27.9%.

Table 5 – First group of countries; WAP; total and yearly percentage change; 2015-30, 2030-60, and 2015-60

		2015-30			2030-60			2015-60	
		Total	Yearly		Total	Yearly		Total	Yearly
1	Lithuania	-13.8	-0.9	Moldova	-33.7	-1.1	Moldova	-41.0	-0.9
2	Bulgaria	-13.7	-0.9	Singapore	-32.2	-1.1	Poland	-39.5	-0.9
3	Ukraine	-13.4	-0.9	Poland	-31.8	-1.1	Singapore	-39.1	-0.9
4	B&H	-12.7	-0.8	Hungary	-29.0	-1.0	Hungary	-37.6	-0.8
5	Russia	-12.6	-0.8	Bulgaria	-27.1	-0.9	Bulgaria	-37.1	-0.8
6	Latvia	-12.3	-0.8	Slovakia	-26.9	-0.9	Ukraine	-35.9	-0.8
7	Slovenia	-12.1	-0.8	Thailand	-26.2	-0.9	Slovakia	-34.2	-0.8
8	Hungary	-12.1	-0.8	Czechia	-26.2	-0.9	Croatia	-33.9	-0.8
9	Belarus	-12.1	-0.8	Ukraine	-26.0	-0.9	Slovenia	-33.3	-0.7
10	Croatia	-12.0	-0.8	B&H	-25.7	-0.9	Romania	-32.6	-0.7
11	Poland	-11.3	-0.8	Romania	-25.7	-0.9	Czechia	-32.6	-0.7
12	Moldova	-11.0	-0.7	China	-25.2	-0.8	Latvia	-32.0	-0.7
13	Singapore	-10.3	-0.7	Croatia	-24.9	-0.8	Thailand	-30.6	-0.7
14	Slovakia	-10.0	-0.7	Slovenia	-24.2	-0.8	Lithuania	-29.4	-0.7
15	Romania	-9.3	-0.6	Latvia	-22.5	-0.8	Belarus	-29.3	-0.7
16	Estonia	-8.8	-0.6	TFYR Macedonia	-21.8	-0.7	Russia	-28.7	-0.6
17	Czechia	-8.7	-0.6	Belarus	-19.6	-0.7	China	-27.9	-0.6
18	Serbia	-8.4	-0.6	Estonia	-19.4	-0.6	Estonia	-26.5	-0.6
19	TFYR Macedonia	-6.0	-0.4	Russia	-18.4	-0.6	TFYR Macedonia	-26.4	-0.6
20	Thailand	-5.9	-0.4	Lithuania	-18.2	-0.6	Serbia	-24.7	-0.5
21	Georgia	-5.0	-0.3	Serbia	-17.8	-0.6	Montenegro	-19.0	-0.4
22	Montenegro	-4.6	-0.3	Armenia	-17.1	-0.6	Armenia	-18.6	-0.4
23	China	-3.6	-0.2	Montenegro	-15.1	-0.5	Albania	-16.2	-0.4
24	Albania	-3.6	-0.2	Albania	-13.0	-0.4	Georgia	-13.8	-0.3
25	Armenia	-1.9	-0.1	Georgia	-9.2	-0.3			
	Total	-5.2	-0.3	Total	-24.9	-0.8	Total	-28.7	-0.6

The WAP of the second group is subject to changes not very pronounced (Table 6). However, this is not necessarily true for the singles countries. In fact, in the first period 10 of the 14 countries are expected to register a growth of WAP in excess of 10% which implies yearly average rates ranging between 1.4% and 0.7 %. In the second period in two gulf countries (the United Arab Emirates and Qatar) the decline will be in excess of 50 percent which correspond to yearly values close to two and in other three gulf countries the yearly values will be included between 1.4 and 0.7.

Table 6 – Second group of countries; WAP; total and yearly percentage change; 2015-30, 2030-60, and 2015-60

		2015-30			2030-60			2015-60	
		Total	Yearly		Total	Yearly		Total	Yearly
1	Bhutan	21.0	1.4	United Arab Emirates	-57.1	-1.9	United Arab Emirates	-55.3	-1.2
2	Saudi Arabia	19.5	1.3	Qatar	-55.3	-1.8	Qatar	-53.0	-1.2
3	Maldives	18.2	1.2	Bahrain	-29.0	-1.0	Bahrain	-21.0	-0.5
4	Oman	17.2	1.1	Kuwait	-25.6	-0.9	Kuwait	-18.0	-0.4
5	Malaysia	15.2	1.0	Oman	-21.1	-0.7	Oman	-7.6	-0.2
6	Lebanon	15.2	1.0	Iran	-17.9	-0.6	Iran	-6.1	-0.1
7	Iran	14.4	1.0	Maldives	-14.9	-0.5	Azerbaijan	-1.8	0.0
8	Brunei Darussalam	12.5	0.8	Brunei Darussalam	-10.3	-0.3	Maldives	0.5	0.0
9	Bahrain	11.3	0.8	Azerbaijan	-7.6	-0.3	Brunei Darussalam	0.8	0.0
10	Kuwait	10.1	0.7	Vietnam	-5.0	-0.2	Vietnam	3.7	0.1
11	Vietnam	9.2	0.6	Bhutan	-4.6	-0.2	Lebanon	13.5	0.3
12	Azerbaijan	6.2	0.4	Saudi Arabia	-3.6	-0.1	Malaysia	15.2	0.3
13	Qatar	5.1	0.3	Lebanon	-1.4	0.0	Saudi Arabia	15.2	0.3
14	United Arab Emirates	4.1	0.3	Malaysia	0.0	0.0	Bhutan	15.5	0.3
	Total	12.5	0.8	Total	-11.3	-0.4	Total	-0.2	0.0

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In the third group, the growth of WAP is quite impressive with an average yearly value of 1.6% in the first period and 0.6% in the second. Even more impressive are some of the national values (Table 7).

Table 7 – Third group of countries; WAP; total and yearly percentage change; 2015-30, 2030-60, and 2015-60

		2015-30			2030-60			2015-60	
		Total	Yearly		Total	Yearly		Total	Yearly
1	Timor	65.7	4.4	Timor	115.0	3.8	Timor	256.1	5.7
2	Afghanistan	65.6	4.4	Iraq	92.5	3.1	Iraq	199.6	4.4
3	State of Palestine	56.1	3.7	State of Palestine	78.9	2.6	Afghanistan	181.2	4.0
4	Iraq	55.7	3.7	Afghanistan	69.7	2.3	State of Palestine	179.4	4.0
5	Yemen	53.8	3.6	Yemen	57.8	1.9	Yemen	142.7	3.2
6	Syria	46.8	3.1	Tajikistan	52.6	1.8	Tajikistan	111.2	2.5
7	Jordan	43.8	2.9	Jordan	44.9	1.5	Jordan	108.3	2.4
8	Tajikistan	38.4	2.6	Egypt	43.8	1.5	Syria	107.3	2.4
9	Pakistan	38.3	2.6	Pakistan	43.1	1.4	Pakistan	97.9	2.2
10	Laos	34.9	2.3	Syria	41.2	1.4	Egypt	91.5	2.0
11	Egypt	33.1	2.2	Kyrgyzstan	33.8	1.1	Philippines	71.8	1.6
12	Nepal	32.5	2.2	Philippines	33.8	1.1	Laos	68.5	1.5
13	Cambodia	28.5	1.9	Israel	31.8	1.1	Kyrgyzstan	67.1	1.5
14	Philippines	28.4	1.9	Cambodia	25.2	0.8	Cambodia	60.9	1.4
15	Bangladesh	26.6	1.8	Laos	24.9	0.8	Israel	60.4	1.3
16	Kyrgyzstan	24.8	1.7	Turkmenistan	23.4	0.8	Nepal	54.2	1.2
17	Turkmenistan	23.6	1.6	Mongolia	17.3	0.6	Turkmenistan	52.5	1.2
18	Israel	21.7	1.4	Nepal	16.3	0.5	Mongolia	41.3	0.9
19	Mongolia	20.4	1.4	Kazakhstan	14.7	0.5	Bangladesh	31.6	0.7
20	India	20.2	1.3	India	8.7	0.3	India	30.6	0.7
21	Uzbekistan	20.0	1.3	Uzbekistan	7.8	0.3	Uzbekistan	29.4	0.7
22	Indonesia	17.8	1.2	Indonesia	7.6	0.3	Kazakhstan	28.4	0.6
23	Myanmar	16.4	1.1	Myanmar	4.0	0.1	Indonesia	26.7	0.6
24	Turkey	15.3	1.0	Bangladesh	3.9	0.1	Myanmar	21.1	0.5
25	Kazakhstan	11.9	0.8	Sri Lanka	2.2	0.1	Turkey	15.7	0.3
26	Sri Lanka	9.0	0.6	Turkey	0.4	0.0	Sri Lanka	11.4	0.3
	Total	23.9	1.6	Total	16.9	0.6	Total	44.8	1.0

In the first period in two countries the average yearly rate of growth of WAP is expected to exceed 4%, in four 3% and in six 2%. The average yearly growth of WAP will decline from 1.6 % in the first period to 0.6 in the second and this trend is shared by the countries of the group. However, 2 countries Timor Leste and Iraq will register a yearly value above 3, two countries above 2 and nine above 1.

Summary - The demographic transition is causing a worldwide unprecedented ageing phenomenon. While ageing has attracted a lot of attention from scholar and politicians worried of the financial sustainability of the welfare systems, much less attention has been paid to another even more relevant effect of the DT: the polarization of the word that is increasingly divided between a growing number of countries whose working age population is dramatically declining and a decreasing number of countries whose working age population is exploding.

As we have just documented the BRI (that represent a very important share of world population) is affected by the same trends: an unprecedented aging phenomenon and a growing demographic polarization.

Once we consider the two trends, it should become immediately evident that they are strictly interconnected, and that the solution of the ageing problem requires not only specific intervention on the pension and LTC systems, but employment and active labour policies.

The next newsletter will be devoted not only to a discussion of the policy measures that could be adopted by China and the other BRI countries at the national level, but also of the policies that China could promote inside the BRI in order to solve or at least reduce the demographic, economic and social problem that will derive in an increasing number of countries by a growing shortage of labor supply and in the other countries by an increasing excess of labor.

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References:

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2017 **Promoting a Common Understanding of Migration Trends. Analysis and Policies**, International Organization for Migration, Cairo.

2014 "Dwindling labour supply in China: Scenarios for 2010-2060". In Attané Isabelle, Gu Baochang, **Analyzing China's Population**, INED Population Studies, n.3, Springer

UN DESA

2017 **World Population Prospects: the 2015 Revision**, New York.

Call for comments and discussion:

The analysis of the demographic trends we have presented in this and previous issues of the newsletter are indeed dramatic and strongly suggest that it is extremely urgent not only to devise correct sets of national policies, but also to reach international agreements on coordinated interventions.

Given the complexity of the demographic, economic and social issues involved, we would like to open a discussion involving our readers. For this reason, we have decided to provide a space where you can send your comments on the data presented and indications on the policies that should be adopted. On our side we will upload statistics and papers we deem relevant and the papers or any other materials you will eventually suggest and send us.

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