

# REGIONAL INNOVATIONS

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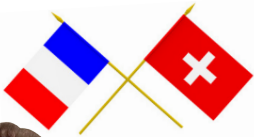
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## About InterRegioNovation

**InterRegioNovation** is the International Association devoted to the transfer and exchange of knowledge and innovations at all regional levels (country, region, city, community etc.) between knowledge transfer professionals (business, research institutions, policy makers, government agencies, individuals, others) in all countries of the enlarged Europe, CIS countries and from other continents for stimulating and enhancing economic and social growth in the regions.

This is a policy and research association that brings together all knowledge transfer professionals who are interested in delivering efficient, flexible, innovative and cost-effective services across the private and public sectors. We work closely with business, research and educational institutions, government agencies, policy makers, NGOs, media, individuals and other stakeholders to promote the interests of their industries.

Our members understand the changing needs of the transfer and exchange of knowledge and innovations and through continuous professional development, marketing and networking opportunities offered in this association, we keep current with the latest knowledge trends and issues that challenge people in their work and life journey. We also offer expansive opportunities for partner connection through our networks.

Journal “Regional Innovations” is one of the Association’s tools for innovators and everybody who is interested in any aspects of innovation development.



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## About journal

On behalf of the Editorial Board, it gives us a great pleasure to welcome you to the forth and the last issue of 2016 of the Regional Innovations Journal. This is a thematic special issue dedicated to broad aspects of demarcation, border management and cross-border cooperation.

The Regional Innovations publishes original research papers, policy analyses, review papers and book reviews in order to establish an effective channel of communication between business, research institutions, policy makers, government agencies, and individuals relative to the analysis of various aspects of knowledge and innovations transfer and exchange within regional dimensions.

This is an independent, peer-reviewed, Internet-based international journal devoted to publishing original research papers of highest quality, sharing ideas and discussing innovation sector within regional dimensions. Normally, four issues are prepared each year. The journal welcomes to submit research papers by exceptional innovators, leading universities, globally recognized business, government agencies, policy makers and political leaders.

We intend that our readers will be exposed to the most central and significant issues in innovations development. We wish to publish papers that exemplify the highest standards of clarity, and that promise to have significant impact on existing front-line debates or to lead to new ones. The journal explores key priorities of the knowledge and innovations transfer and exchange in terms of critical aspects of human life (economy, law, science, business, health, education, culture etc.). We therefore welcome submissions not only from established areas of research, but also from new and emerging fields and those which are less well represented in existing publications, e.g. engineering studies, biomedical research etc.

We also strive to ensure that being under expert evaluation, each submission will receive developmental and supportive comments to enhance the article. Our refereeing process will involve that each submission will be reviewed by one or more specialists in the relevant field. Articles will be added to the volumes and the journal audience will receive e-mails updates to encourage them to the new articles.

We are delighted with, and immensely grateful to the large numbers of colleagues, both members of the Associations InterRegioNovation and FranceXP (France), representatives from many universities in France, Latvia, UK, Azerbaijan, China, Belarus, Ukraine and other institutions, who have supported the editorial process. And we are very proud of the expertise that they collectively bring, which we believe is unsurpassed by any contemporary innovative journal.

We are immensely grateful to our colleagues for their support and advice through the process of setting the journal up, and for the confidence they have placed in us in supporting this initiative at a time of economic uncertainty.

In the development of the Regional Innovations to date, we would like to enlist the support of a number of organisations who wish to promote this online journal to their experts. To ensure its sustainability, we would also like to invite other organisations, networks, conferences and meetings to associate themselves with the Regional Innovations. We therefore aim for the Regional Innovations to become the leading online forum to globally disseminate outstanding research papers on innovation sector in regional dimensions. Being an online periodical, the Regional Innovations is also a forum for exchange of imaginative ideas readers wish to share. Contributions of articles on innovations sector and your comments about this issue are very welcome.

To this end, if you lead, represent, or are a member of any such organisation, please contact us to offer your support and commit to promoting the Regional Innovations as a publication outlet for research undertaken by your experts.

We do hope you enjoy and benefit from the Regional Innovations! And many thanks for staying with us in 2017!

**Jean-François Devemy**  
**Publishing Director**

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## THE REFORM OF DECENTRALIZATION AND STRATEGIC BUDGET PLANNING: PROSPECTS FOR UKRAINE

### **Abstract**

*The article is devoted to prospects of conducting the reform of decentralization and its relationship with reforming of the administrative division of Ukraine and introduction of medium-term budgetary planning. Also the article presents the relationship between state and local budgets within the decentralization reform in Ukraine, new revenue structure of local budgets and renewed functionality of local governments according to changes in Ukrainians legislation connected with the decentralization reform. More obligations of local governments directed on development both the decentralization and strategic budget planning are suggested.*

**Key words:** decentralization, administrative reform, strategic budget planning, state and local budgets.

Implementation of the decentralization reform is the strategic priority for Ukraine. Together with the alteration of Ukrainian administrative division, which is made within administrative reform, the reforming of budget management caused by decentralization must stay in the spotlight.

**The reform of decentralization** aims to the increase in powers of local communities to legislatively measured level of independence. This independence, first of all refers to the capacity of local budgets, in meaning of transition to self –financing. Such activities require significant reforming of budget management, because the development of each region is a strategic goal not only for this region, but also for the State in the context of the national strategy. That's why the necessity of strategic planning extends its measures from the government commitment to the liability of each community.

Decentralization can be considered in such aspects [8]:

*Structural decentralization* is determined by quantity of administrative units in the state. The more there are administrative units, the more decentralized the system is.

*Decision decentralization* is determined by scope of issues that community can decide autonomously without government's permission or help.

*Resource decentralization* determines the level of resource allocation between government and local communities.

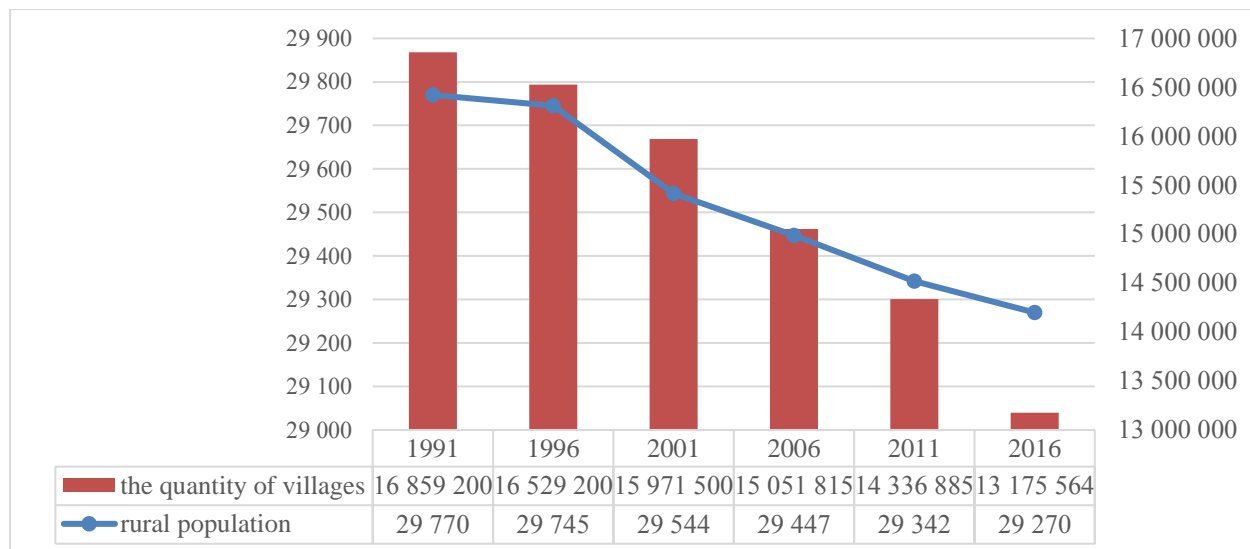
*Electoral decentralization* determines election procedure for local governments.

*Institutional decentralization* determines the level of power and authority, delegated to local governments. Medium-term budgetary planning gets more significant in the budget process of Ukraine. However each government directs its attention to certain aspects of medium-term budgetary planning, but the problem of introduction medium-term budgetary planning in the context of implementation of decentralization reform remains unsolved.

Strategic budget planning of local communities must be directed to regional revenue grows, improvement of competitiveness between the regions, providing the ecological safety of citizens, achieving high performance in the spheres of public services concerning education and health care etc. Of course,

each region cannot perform all this tasks by its own, therefore the new system of intergovernmental transfers if introducing too. The list of powers delegated to local governments is determined in The

Concept Of Local Government Reforming and Territorial Organization of the Government (further The Concept) [5]



**Fig. 1. The dynamics of changes of the rural settlements and the rural population in Ukraine during 1991-2016 years.**

**Source:** Compiled by the author according to data of State Statistics Service of Ukraine: <http://database.ukrcensus.gov.ua>

Rural population significantly reduced during last 20 years. According to data of State Statistic Service of Ukraine (Fig. 1) rural population in 2016 year decreased on half a million comparatively with 1991 year. However, we can suppose that this data is underestimated, because the big quantity of rural population of working age actually live in cities but are registered by the place of birth. Villages also disappear from the Ukrainians map, but not as dynamically as the rural population do. Therefore, there is problem of too fragmented administrative division, when settlements cannot provide its viability. Accomplishing the decentralization under such conditions is impossible, because government cannot delegate financial independence to settlements with little population, majorly elderly. Consequently together with the reform of decentralization in Ukraine is conducting the change of administrative division, concerning *Voluntary association of communities* (as for 2015 year 159 communities were formed, as for now 209 communities are formed and nearly 40 are at the stage of execution).

*Community* is administrative unit that consists of several settlements, has common executive authority and infrastructural objects, secondary and preschool

education institutions, health care, cultural institutions etc.

The main tasks of decentralization reform in Ukraine are:

1. Changing of administrative division. The three level administrative structure is introducing in Ukraine, it consists of basic level (150-1800 communities), district level (not more than 150 districts) and regional level (27 regions).
2. Integration of local communities: from approximately 13 thousands of local communities create not more than 2 thousands by Voluntary association of communities.
3. Alteration of the structure and functionality of local governments. Regional, district and village councils remain as local authorities. However administrations (regional and district) will be replaced by the person appointed by President — *Prefect*. His main task is supervision of legality of local government activity. Prefect is responsible to President and reports to Government within its powers and functions,

assigned on him. Village will be headed by *Starosta*, elected in local elections. *Starosta* can perform the function of executive authority of community, if it is necessary. Functional responsibilities are defined in The Concept Of

Local Government Reforming and Territorial Organization of the Government [5]. The part of obligations are delegated from The Government to local level (Table 1).

**Table 1**  
**Administrative division and local governments in Ukraine within conducting the reform of decentralization**

Administrative unit	Quantity according to reform	Local governments	Delegated obligations
<b>Region</b>	127	Regional councils and its executive authorities**, Prefect*	1.ecological safety; 2.regional infrastructure; 3.vocational education; 4.highly specified Medicaid 5.development of culture, sport, tourism.
<b>District</b>	150	District councils and its executive authorities**, Prefect*	-boarding schools of the general profile; -health services of the secondary level (3-4 hospital districts, treatment of 95 % of diseases).
<b>Community (village, city)</b>	1500-1800	Village or city councils its executive authorities, the Head of the city, <i>Starosta</i> of the village.	1.development of local infrastructure: roads, landscaping etc. 2.public services (including electronic): - preschool, secondary and adult education institutions; - the services of ambulance ( clinic in each community, time for arrival of ambulance not more than 30 minutes); -public security -firefighting etc. 3. development of culture and physical education.

\*Prefect as executive authority must be approved by changes to Constitution of Ukraine, according to the draft law «About making changes in Ukraine’s Constitution» №2217 from 01.07.2015 year [6]

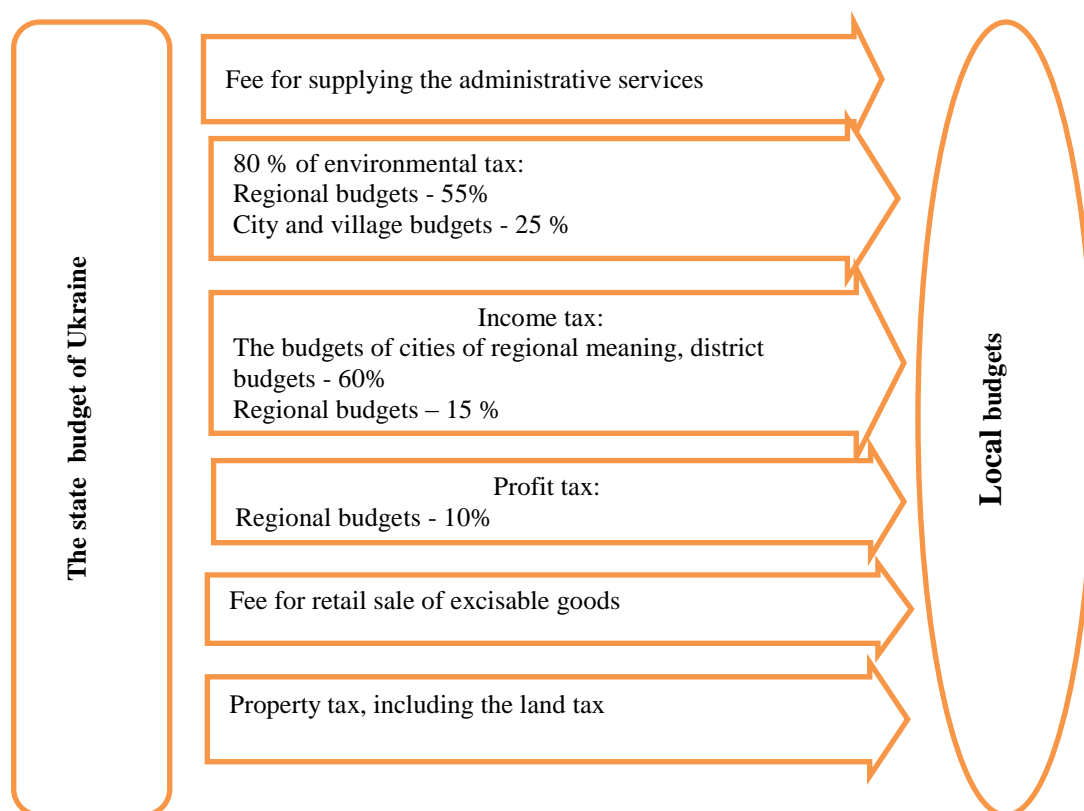
\*\*Executive authorities of local government — departments, committees (The law of Ukraine «About local government»[2]). This authorities are subordinated to regional and district councils, they are also subordinated to relevant authorities of executive power in delegated obligations.

As can be seen from the table 1, the territorial community gets the most of obligations, not the regional center does, and this is the main key of decentralization — to give the power to people. The expansion of local government functions will lead to more responsible relation to the development of the territories, and new administrative division will afford to save financial viability of communities.

1. Achievement of budget autonomy and financial independence of local budgets, strengthening the material and financial foundations of local

governments. In this direction the changes to budget process and budget legislation of Ukraine are made, particularly the changes to Budget Code, the changes in tax administration. From the 01.01.2016 year the changes to Budget Code related with decentralization reform had taken the effect [7].

The reforming of budget sphere concerns first of all to the expansion of revenue bases of local budgets (fig.2):



**Fig. 2. The reform of Budget Code of Ukraine concerning the expansion the revenue bases of local budgets**

**Source:** Compiled by the author according to data of the law of Ukraine «About the amendments to Budget Code of Ukraine concerning the reform of intergovernmental relations»: <http://zakon3.rada.gov.ua/laws/show/79-19>

Also the reforming of Ukrainians budget sphere provides the introduction of new kinds of transfers:

- Basic dotation provides the smoothing of tax ability of local budgets, by establishing the level of tax income per person (income and profit taxes). Equalization dotation is canceled by new version of Budget Code of Ukraine;
- Educational subvention;
- Medical subvention;
- Subvention for training the production personnel;
- Subvention for providing the medical measures.

The material, stated above concerning the reform of decentralization is given with the aim of more clear review of necessity of introducing strategic budget planning within this reform. Though the reform of decentralization is in on the stage of introducing yet, and a lot of steps are still ahead, particularly concerning the delegation of educational and medical services, but the necessity to elaborate forecasts and real plans appears now. This concerns first of all to

the earnings from the income and profit taxes, because it is necessary to Government to define the basic dotation for the regions in the Draft Budget for the next year. Fig. 3 illustrates the relationship between the central and local budget planning considering the reform of decentralization. Due to the transfer of the part of taxes to the local level, the budget planning get more important for local governments. There appears an urgent need of reliable forecasting of tax revenues to local budgets, also the forecast of revenues from the income tax and profit tax, data on population, data for the planning educational and medical subventions must be submitted to the Ministry of finance of Ukraine. In terms of implementation of medium-term budgetary planning, all the forecast documents approved for one year budget planning must be submitted also for 2 years, following the planned period. This requirement is defined in new version of Budget Code of Ukraine (article 33).

Due to this article the Ministry of finance of Ukraine must submit the **Budget resolution** for 2 years,

following the planned period, in accordance the Ministry of economic development and trade must submit the program document «**Key indicators of economic development**» and the national Bank of Ukraine must submit the program document «**The indicators of exchange rate policy**» for 2 years, following the planned period. In this context advisable is to oblige the local governments to submit the tax revenue forecasts and budget requests for educational and medical subvention.

Since the main aim of decentralization is the expansion of the territorial community rights, which is directed to the increase of local citizen's welfare, the question of strategic development of community must be of great importance for the local governments. The representatives of the local governments have the best understanding of opportunities and problems of the region, and that's why can give the optimal and effective proposals of development of the region and write the plan of actions.

As follows the reform of decentralization is directed to the increase of the interest of local governments to

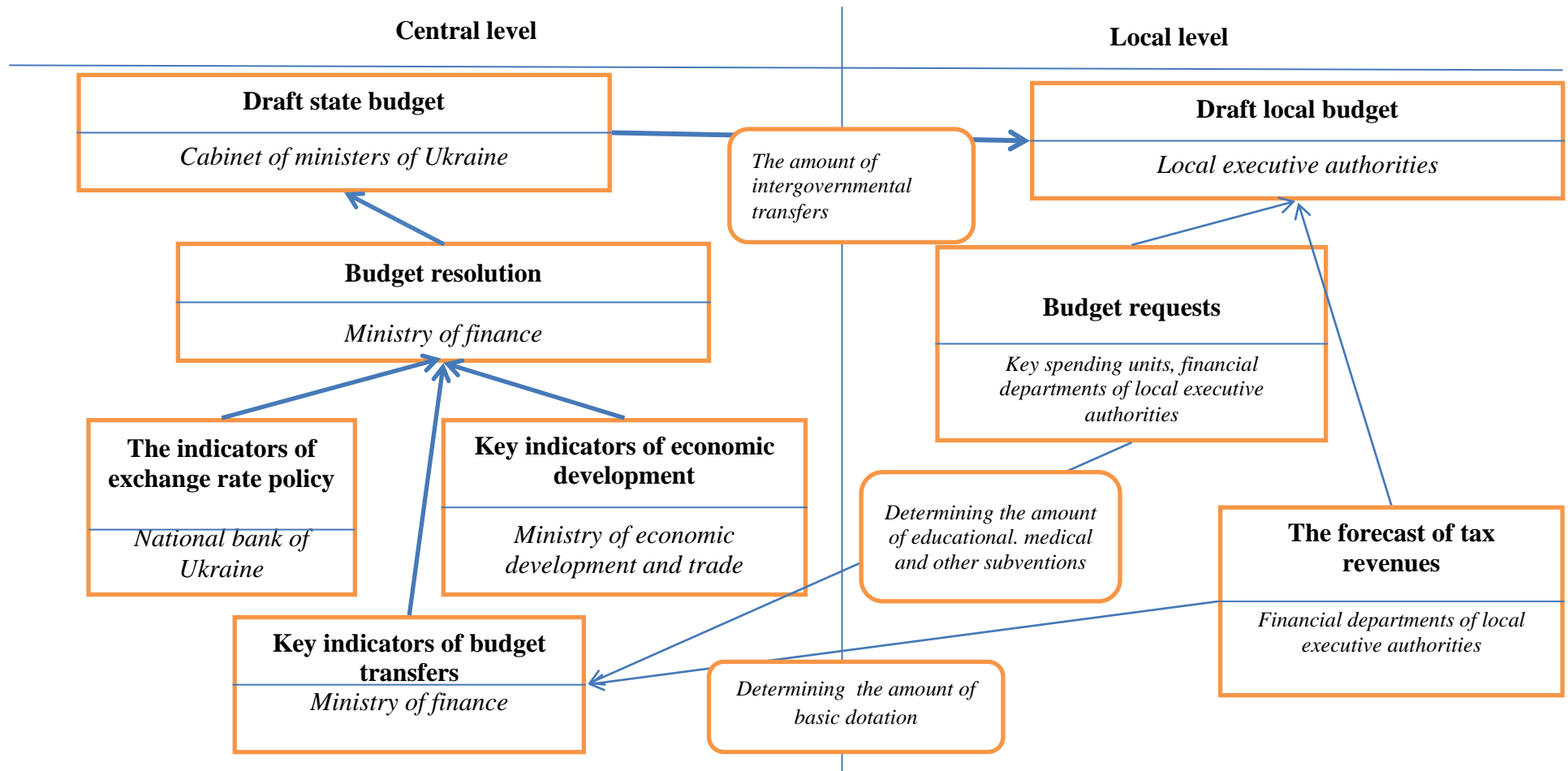
enlarge the revenue base of local budgets. The problem of subsidized budgets for the State budget will be gradually eliminating by improving the investment climate of the region and by the possibility to spend the budget earnings independently. It will be eliminated the problem donors regions, that through the equalization dotation, that existed before, financed unprofitable regions. Expected, that after conducting of this reform hidden reserves of filling the local budgets will come out, and this will also cause the increase of competitiveness of the region.

The next stages of development of the regions is formation and implementation of medium-term and long-term programs of local development, aimed the optimization of local expenditures, attraction of Government financing within facultative expenditures or attraction of municipal credits. Cooperation of local governments and bank sphere is a new practice, spread in the world, but in Ukraine it is not legislatively normalized yet.

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**Fig. 3. The relationship between the central and local budget planning within the reform of decentralization.**  
*Source: Compiled by the authors.*

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**CITIES, STATES AND EMPIRES**

**Abstract**

*Five years before leading the unexpectedly successful campaign for the UK to leave the EU, the then Mayor of London, Boris Johnson, had been referenced in an article in the Economist which presented the implicit ideology of both the mayor and the city: “Londonism calls for state spending on infrastructure and a liberal line on immigration. Essentially, it is a commitment to relentless growth and openness. The city long ago made the transition from mere capital to global hub. Now it has a political philosophy to match...” (Londonism and its adherents. The creed of the capital. The Economist, 3 February, 2011. <http://www.economist.com/node/18073240>).*

*The city’s ideology, with its emphasis on the global rather than the national, and which reached its apogee at the London Olympics of 2012, was, and is, the polar opposite of the Brexiteers’ preoccupation with national identity and stricter border controls. Already at the time of the Economist article, in 2011, a tension could be discerned between the global orientation of London’s ‘city state’ and the rest of Britain which had, following the financial crisis of 2008, begun to move in the opposite direction, culminating in the Brexit vote of 2016.*

**Key words:** global cities, networks, neoliberalism, globalism, self-government, neo-medievalism, empire.

**Introduction: Global and National**

The idea of London becoming increasingly detached from the rest of the UK was not a new one, but dated back to the de-regulation of the financial sector in the 1980s. King (1990) had referred to London becoming ‘unhooked’ from the country of which it was the capital – the idea being that it had been an imperial capital and had retained a global role which now no longer depended on its being capital of the United Kingdom. Friedmann (1995), a leading proponent of ‘world cities theory’, saw networks of cities becoming more important as a result of changes in the international economy, such that national states would lose their significance. Whereas previously globalization had been seen as giving power to multinational companies, it was increasingly the cities where those companies and organizations were concentrated that were now seen as powerful (see Sassen, 1995). Brenner (1998) argued, however, that there was no zero-sum relationship between cities and

nation-states, but that their respective roles were changing as the transnational division of labour in the global economy shifted. The process could be described as de-territorialisation and re-territorialisation – in effect a loosening of the notion of national economy and the rise of cities as nodes of international networks.

*“Global cities, whether major or minor, are the key nodes articulating these new or strengthened cross-border networks. We can see here the formation, at least incipient, of a transnational urban system. These cities are not simply in a relation of competition to each other, they are part of emergent global divisions of labor” (Sassen, 2010).*

The idea of network was central to Sassen’s idea of a global city, rather than a world city. Whereas genuine world cities are few, many cities can take on ‘global city functions’, becoming nodes in the international financial and service-based economy.

From the early 2000s these changes (global urbanization, rise of global cities) were described by academic commentators in increasingly negative terms as examples of 'neoliberalism' (see Purcell, 2003, Brenner and Theodore, 2005, Weber, 2012). The conspiratorial tone of Hardt and Negri's (2001) highly influential 'Empire', which referred to a global de-territorialised power, detached from any territorial nation state (even the United States), fitted well with the apparent rise of a global economy of urban networks.

At the heart of the debate was an ambiguity that could not easily be resolved – between the liberal freedoms associated with the modern city and the perceived loss of the democratic control exercised through national political systems, so that freedom was experienced alongside powerlessness. Ong (2007) presented a view of neoliberalism as consisting not of a conspiracy but a force of nature, a 'tsunami' of economic change around the globe, working through a range of 'migratory technologies', adapting to different contexts. However, neoliberalism could be experienced positively as a "governing through freedom" that requires people to be free and self-managing in different spheres of everyday life – health, education, bureaucracy, the professions, etc. There is also a stress on responsibility at the community level, and new requirements of self-responsibility by individual subjects" (Ong, 2007).

The world has, however, changed since the early 2000s when the concept of neoliberalism, (conceived of as a force to be resisted or 'contested') became so popular. If anti-globalism was a Left ideology in the early 2000s, by 2016 'globalism' had become the Right's enemy of choice. References to neoliberalism have become scarce on the Left. As the Right seeks to re-establish borders, the idea of open borders - identified previously with 'neo-liberalism' - has become associated with the Left.

The political confusion reflects the contradictory nature of the trends observed. For example, Moises Naim's 'The End of Power' (2013) was received as a celebration of the crumbling of traditional powers of state or hierarchical power but may be read as a warning of the dangers of institutional decay. Josep Colomer's (2008) concern for the autonomy of smaller regions and states led him to re-habilitate the concept of empire, not in Hardt and Negri's sense of the term, but in the more traditional sense of great powers or supra-national bodies which exercise power beyond the scope of the traditional or Westphalian nation state.

A similarly paradoxical picture was presented in a popular article, 'Imagine there's no countries', in the New Scientist in 2014, which showed how developments favoured global or local problem-solving, and now the national level might seem superfluous, except for enforcement, so that power would increasingly come to be wielded according to a more dispersed, networked neo-medieval model.

However, such analysis tends to assume that the loss of the vertical power of the state will be even experienced across the world, whereas in reality states emerge with different levels of power and different potential to influence other states (this unevenness of post-national development was anticipated by Cooper, 2011). Since the early 2010s the tendency has, arguably, been not so much that of a hollowing out of the national level leading to more power at supra-national and local levels, but more that of an (unexpected) weakening of the *supra-national* level, creating a vacuum that appears to be filled, on the one hand, by a small number of nation states exercising influence over other nation states, and, on the other, by transnational networks that are neither national nor supra-national.

The contradictions of these trends may be explored in relation to organizational concepts such as differentiation/integration and vertical or horizontal coordination.

### **Vertical and Horizontal Coordination**

In organizational theory it has long been customary to contrast the pre-modern 'craft' organisation of work, based on 'mutual adjustment' between skilled tradespeople (horizontal coordination) and the modern approach, epitomised by Taylorism and Fordism, characterised by division of labour into simple tasks, and vertical coordination through an administrative hierarchy, analogous to the state hierarchies described by Weber. Both the Taylorist and Weberian systems combined standardisation and centralisation, based on the assumption (or ideal) that each level should have a higher level of technical expertise than the one below.

Until the 1980s Taylorism was widely regarded as an inevitable consequence of the economic system. However, successive advances in technology enabled a reversal of the trend towards greater division of labour and hierarchical control and facilitated instead and increase in the horizontal network as a model of coordination and as an alternative to either hierarchies or markets (see Thompson, 2003).

A similar series of paradigm shifts has occurred in the organisation of political space, and over approximately the same timescale. From the sixteenth to the eighteenth centuries the city states that prospered in the mediaeval period, based on mercantile and craft networks within and between cities, were gradually subordinated to and absorbed into the emergent absolutist nation states. This trend arguably reached its apogee with the creation of nation states following the break-up of colonial empires and, a generation later, the Soviet Union. The end of the Cold War accelerated the perceived process of globalisation in which the nation state came to be seen by globalists such as Kenichi Ohmae (1995) as increasingly irrelevant as an actor, compared with multinational firms and regions, leading to the rediscovery of the pre-modern city-state or region state on the model of Venice or the Hanseatic League, regarded as precursors for de facto region-states in China and India.

Globalisation is more complex than simply an expansion of horizontal networking, but, as in organisational theory, demonstrates the inter-relationship of integration and fragmentation. As Taylor argues, globalization may be seen as comprising two contradictory trends – ‘up-scaling’ and ‘intensified networking’, the first for our purposes could be characterised as vertical coordination, the second as horizontal. The two are connected – as global co-ordination increases it opens the way to fragmentation at the local level. When public goods such as security and enforcement of trading rules are delivered globally then the pressure increases for fragmentation of political institutions at national level, hence the re-emergence of the city-state model.

However, there is some ambiguity over the relationship between cities/city-states, nation-states and empires. Gaubatz (2009), while celebrating the possible return of city states, sees empires and city states as mutually-opposed categories, as if empires were large nation-states rather than supra-national institutions. However, their roles are quite different. Van Creveld (1999) describes in detail how the defeat of the (Holy Roman) Empire in Europe was crucial to the rise of the modern state, alongside the defeat, by the same national monarchs, of the Church and of the self-governing towns and cities, all of which had been obstacles against the accumulation of sovereignty by the modern nation-state. However, it was Empires rather than nations that guaranteed the trade routes on which the cities’ prosperity had been based- Pirenne’s influential (1936) thesis emphasised the role of the Carolingian Empire in freeing up the Mediterranean trade routes enabling the re-development of European

cities which had been economically (as opposed to administratively) stagnant since the fall of Roman Empire in the West.

Similar ambiguities characterize the relationship between localities/cities, regions and states, whether these are simply hierarchical or functional levels and not fundamentally different, or whether, for example, urban centres are essentially different from territorial divisions such as districts, regions or states. At one level, city-states are just states on a small scale, on another they may be seen as embodying different values – Taylor (1995) for example opposes the ‘commercial’ values on which cities are ultimately based to the ‘guardian’ values on which states are based, a distinction which is reminiscent of Pirenne’s contrasting of the values of city burghers and the feudal (territorial) princes.

Something of this opposition may still be found in relations between cities and states and between cities and regions, in that regional authorities may be seen as either representatives of the state or would-be-states in their own right. However, Pirenne had no illusions about the cities as antecedents of modern democracy: Pirenne (1936), was skeptical regarding any assumption that the city burghesses were either revolutionary in their relation to feudal authority or democratic in the areas under their own control: ‘nothing could be further removed from the spirit of modern democracy than the exclusiveness with which the medieval towns continued to defend their privileges...in those periods when they were governed by the crafts’(1936:57).

### **Empire and City: Imperialism versus Federalism?**

The anti-state polemicist Kropotkin (1939), writing in the late nineteenth century, used the examples of the Roman Empire and the medieval fee cities to promote his idea that power could be either hierarchical and vertical (‘imperialism’) or horizontal and based on co-operation (‘federalism’). The idea was correct in principle but did not fit the historical record. Kropotkin saw the cities of the Middle Ages in Europe as having grown out of villages, particularly those of the ‘barbarians’ (Kropotkin, 1939:129) from whence the traditions of self-government are assumed to have evolved (1969: 16). Thus, rather than laying waste the cities of the Roman period, the barbarians are credited with founding their distant successors.

By contrast, Kropotkin casts the Roman Empire as the villain, the archetypal state: ‘*even now the legist and the authoritarian still admire the unity of that Empire, the unitarian spirit of its laws and, as they put it, the beauty and harmony of that organisation*’ (1969:11).

This phrase indicates why Rome is singled out – because Rome has come to symbolize total state power for would-be state authoritarians and bureaucrats (Kropotkin, 1939:17). The barbarians, with their clan organization, on the other hand, are presented as peaceful forerunners of the medieval guilds. This is an inversion of the reality – the *municipii* of the Roman empire flourished under the protection of Rome, the empire being oriented towards city autonomy rather than direct rule (Reynolds, 1988:17) and the cities and the inter-municipal economy were laid waste or withered once Rome collapsed (see Ward-Perkins, 2005). Urban society was largely destroyed by the barbarian invasions and stagnated for several centuries (*pace* the Pirenne thesis that it was the lack of trade routes rather than the barbarians that constrained urban development during Late Antiquity).

Kropotkin's refusal to see the Roman *municipii* as precursors of the mediaeval free cities he extols is more understandable if the ambiguity and symbolism of Roman cities is taken into account. Hingley (2005) has described the way in which Roman cities presented two contrasting aspects – on the surface forming part of the system of imperial power and control (situated on main transport routes and incorporating symbolic architecture to demonstrate their link with Roman power), whilst behind the façade they provided a base for local self-government of communities and (often-pre-existing) elites (Hingley, 2005: 78-87). In other words, Roman *municipii* were both outposts of the *vertical* power of the State and bases of self-government and *horizontal* trading networks, and these roles were complementary and mutually supporting. Kropotkin appears to project onto Rome the bureaucratic characteristics of the absolutist nation-state in which the vertical power does not create the conditions for horizontal co-operation, but instead actively eradicates it: "*thus as soon as the State began to be constituted in the XVIth century, it sought to destroy all the links which existed among the citizens both in the towns and in the villages*" (Kropotkin, 1969: 45).

The reason for Kropotkin's stance on Rome and its cities may be found in his early career (1861-7) which he spent as a Cossack officer in the Russian Far East. The inadequate response of the local state authorities (ranging from theft of funds to incomprehension) to a series of disasters affecting the local population confirmed Kropotkin's complete disillusion regarding the capacity of regional administration to function, so long as it was 'a branch of a tree having its roots in St Petersburg' despite good intentions:

*Whatever was started for the good of the country by local people was regarded with distrust, and immediately paralyzed by hosts of difficulties which came, not so much from the bad intentions of the administrators, but simply from the fact that these officials belonged to a pyramidal, centralized administration. The very fact of their belonging to a government which radiated from a distant capital caused them to look upon everything from the point of view of functionaries of the government, who think first of all about what their superiors will say.* (Kropotkin, cited by Berneri, 1942).

The Siberian towns where the young Kropotkin served were thus no Roman *municipii*, but military or bureaucratic outposts, part of an fragile vertical line of reporting that led back to St Petersburg. Far from being complementary, Kropotkin found state and civil society were distinct to the extent that the town authorities in effect prevented mutual aid between citizens from functioning in the towns but it could be found in the villages further from the urban centres (Dugatkin, 2011: 74).

Kropotkin sees civilisation as a cycle of growth and decay as each successive urban renaissance is crushed by the re-emergence of the Roman state in one form or another: "*throughout the history of our civilization, two traditions, two opposing tendencies have confronted each other: the Roman and the Popular traditions, the imperial and the federalist*" (1969:55). The federal principle is seen as exemplified by what Kropotkin sees as the 'communist' movement of the 12<sup>th</sup> century which set up societies on the basis of free agreement and federation rather than the 'pyramid' of the State (1969:55).

Similar diagnoses to Kropotkin's were to become widespread in the former Soviet Union and Eastern Europe towards the closing years of Communist rule when the problem was no longer experienced as terror but as an all-encompassing and inefficient bureaucracy (see Ehrenberg, 1998:15), without the Weberian safeguard of clear subordination of officials to a democratically-accountable authority. The lack of the latter in the countries concerned meant that the bureaucracy could only be resisted through 'civil society'. Thus, just as in Western Europe the academic and policy discourse was moving away from the state and towards the concept of governance to incorporate both state and non-state actors, so in the former Communist world, the discourse was moving in the opposite direction, towards a focus on state and society as mutually exclusive.



## State and Society

The idea of a distinction between state and society has figured in Western political thought since Aristotle, for whom the two categories nonetheless tend to overlap within the concept of *'polis'* (Ferguson (2004). The assumption has long been that one is subsumed into or subordinated to the other, but with differing views regarding the roles played by each. Hegel saw the Prussian state as having successfully subordinated society (van Creveld, 1999:142) whereas for Marx the state is subordinate to society, understood narrowly as the economic system. Post-modernism was, if anything, harsher on the notion of the state – Foucault starting from a rejection of the assumption of the state's existence and focusing on the state as mass of different forces, power relations and disciplines, which had arisen for specific purposes, rather than being the products of an essential state (Jessop, 2007), although this can appear like denying a wood's existence on the basis that it is a collection of trees. Jessop (2008) brings together Marxist and post-modern approaches in a 'strategic-relational' approach, in which the state is viewed as a set of social relations, not a subject or an instrument. Jessop and others have to some extent been fighting a rearguard action against an alleged resurgence of 'neo-statism', following the trend towards 'bringing the state back in' (Hay and Lister, 2006).

Notions such as that of the co-operative state, associated especially with German federalism, and traditions of multi-level governance (Toonen and Steen, 2007) suggest that vertical relations between different levels of government are more than a zero-sum game. Similarly, the application of the concept of 'governance' has reinforced the idea of co-operation on the horizontal axis between state and non-state bodies, bringing together the 'civicness' celebrated by Putnam (1993) and the rediscovery of networks as an organizational principle.

Far from being creatures of the State, cities in many cases pre-dated nation states – and the emergence of the latter led to a reduction in self-governing rights of cities (see Mackenney, 1989), this even being an essential condition for the establishment of the state

(van Creveld, 1999:104-117). Cities may thus be seen as a hybrid category between central and local, vertical and horizontal, hierarchy and network, between the state and community/civil society. As such cities transcend any simple opposition between state and society or between nation and the wider world. However, the evidence suggests that city states, however well networked internationally, cannot survive outside of a supra-national system of power, whether that of great power diplomacy or co-operative transnational integration.

## Conclusion

The distinction between horizontal power (society, networks) – and vertical power (nation-state, hierarchy) is useful in that it helps to explain how changes in the global economy and international division of labour involves or impacts on the relative power of institutions such as cities. However, as with the related distinction between state and society, this distinction should not be taken to mean that the two types of power are mutually exclusive or that they cannot function in combination. Just as a weak state may be even more deleterious for society as an overbearing state, so the faltering of Westphalian nation-state in recent years will not necessarily lead to a golden age of city states.

The power and prosperity of city states cannot survive long without some form of supra-national guarantee. This may come from a horizontal network of co-operation but it is unlikely to be sustainable without the involvement of at least one major 'vertical' state. Although, as Hobsbawm (2008:12) has observed, lasting global imperial hegemony has never been a practical possibility, the absence of hegemonic power is also unlikely to occur in practice. Watson (2007), while noting the 'anarchophilia' of fellow proponents of the international society model (the idea that rules can enable a system based on entirely independent states), concludes that, in practice, inequalities between states are inevitable and therefore all international relations arrangements involve a degree of hegemony – in other words a combination of horizontal and vertical powers – although the form this combination takes will vary significantly.

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## REASONS FOR THE DECREASE OF FOREIGN INVESTMENTS IN CHINA: AN OVERVIEW OF INDIA'S PROSPECTS FOR BECOMING THE WORLD'S LEADING MANUFACTURER OF GOODS

### **Abstract**

*The article provides an overview on the key reasons for the decline of growth dynamics in China and examines the limitations and flaws of the Chinese growth model that caused a lot of foreign manufacturers and investments to leave China and move their business to other countries, particularly to India. The research also defines economic growth models for China and India and studies the innovations that played a significant role in the implementation of the economic reforms in these countries.*

**Keywords:** *economic growth model, manufacturing, foreign investments.*

Countries with emerging economies, especially China and India, have recently developed political and economic power. In the modern world, China is a country with the greatest history of development. The Chinese economy has grown at a phenomenal rate and, according to most economists, it was mostly due to the unique government reforms of the 1990s. Nearly 40 years of reforms and innovations have transformed China into one of the fastest-growing countries with impressive political influence on the international scene. At the same time, the growth of such traditional mechanisms, such as protection of property rights, reforming of political institutions, and legal protection of private businesses, were not the main components of these reforms.

Due to an early start and the support of government programs, income levels in China have overtaken its main rival India. The role of foreign investment in China was very significant, and the main growth in exported goods and innovative products were due to the foreign investment sector. In terms of high economic growth, government support and reforms had a big influence.

The highest influx of investments into China was in 2006 with \$69 billion, exceeding the total investments

of 2004, which reached \$60 billion. When comparing the second-world giant India to China, despite India's development beginning a few decades later than that of China and having a lower rate of growth, it has become China's main competitor in economic development, particularly in the areas of foreign direct investment (FDI) and production export. Although the FDI amount in India is still about 6 times lower than in China, in the last 4 years, net FDI inflow into India has increased by almost 2 times from \$ 23.9 billion in 2012 to \$ 44.2 billion in 2015 [1]. India's GDP after the crisis of 2008, when it stood at 3.8%, has risen to 7.57% in 2015, while China's GDP has decreased from 7.1% in 2014 to 6.9% in 2015 [2]. By 2040, China GDP is expected to fall to 4%, while that of India is expected to stay at 7% till mid 2030s and remain at 6% by 2050.

### **Economic Growth Models Of China And India**

Throughout history, China has regularly experienced periods of rise and fall. For example, in the 18<sup>th</sup> century, despite being economically isolated from the outside world, China accounted for 30% of the world economy. In 1750, China produced 32% of the global GDP whereas England, France, Russia, Germany and Italy together accounted for only 23%. India

accounted for 24%. These two Asian countries accounted for more than half of the global GDP [3]. However, internal strife within China led to civil wars and rebellions in the 19<sup>th</sup> century, which resulted in the Franco-Chinese and Sino-Japanese War. Due to the political situation, China's share in the global GDP in 1900 fell to 6%. The unity of the country was restored by Mao Zedong, who is highly respected in China for this development, despite the following economic depression.

At the end of 19<sup>th</sup> century, India was exporting a large number of industrial and agricultural goods to the global market. However, since India was a British colony, the trade benefits did not have any distinct influence on the Indian economy. Unfavorable economic conditions for locals and poverty resulted in rebellions that caused the global GDP contribution to fall to 1.7%.

In the end of 1970, after decades of poverty, China began transitioning from a closed to an open society to allow for the flow of foreign investments to enter the country. These investments facilitated the modernization and development of industrial production in the 1990s, but the most significant impact on this development was made in the 1980s, which created the possibility for China's economic growth.

The reforms of Deng Xiaoping led the country to transitioning towards a market economy, which Mao strongly opposed. These reforms began in 1978 after the famine period, when 21 families in one of the poorest villages in the Anhui province decided to share the commune property land after 60 residents of this commune died of hunger. This action resonated and was followed by some other villages and the problem of hunger had been eliminated almost immediately. In 1979, after some consideration from higher-level authorities in Beijing, the action was legally approved and implemented. The realization by the government of the effectiveness of private production and the importance of private initiative was a very important step towards further development in China.

The "one country - two systems" policy was new and revolutionary for China. The first stage of China's development was implemented due to the capital of Chinese living overseas, and the proximity of Hong Kong and Macao have played a major role in attracting these investments. Ideally, the modernization of China and the transition to a market economy should have been achieved while maintaining the leading role of the Communist Party.

To stimulate investment, Deng Xiaoping created special economic zones, set low taxes, and gave the opportunity for factories to produce for export. Thus, the flow of direct foreign investments from Hong Kong, Taiwan and the United States went to the 4 special economic zones: Shanghai, Zhuhai, Shantou and Haikou. When it was seen that these special regions were successfully attracting direct foreign investments, numerous additional special economic zones were created. These zones had an excess of cheap labor and housed the primary production and processing industries, which drew the attention of western investors seeking the opportunity to enter the large Chinese market.

After foreign businesses were allowed to function within the special economic zones, thousands of Chinese were given jobs to begin producing goods for the world. When these companies were looking for the possibility of opening factories in China, they faced an unexpected problem: the workers lacked qualifications and they also often lacked the general idea about the products that they had to produce. These companies not only had to invest their money in building factories and purchasing equipment, but also in training their employees. However, the government granted foreign companies even more favorable conditions for functioning within China, which offset the problem of underqualified workers, while limiting the same conditions for local private firms.

Vast agricultural lands of South and East China were used for industrial development. Low taxes were offered to businesses and numerous large infrastructures were built. Many village residents were moved to other locations and plants and factories were constructed where these villages used to reside. Raw material processing plants were also erected near the factories that would use these processed materials.

Despite the fact that China preserved the Soviet five-year plan economy, Deng Xiaoping followed the example of Singapore's economic development. In addition, China built coal mines and modern power systems and generators in the 1980s to provide electricity for the new plants. For the new factories to export effectively, efficient methods of transporting goods within China and abroad were required, which resulted in ports, airports and railway stations being built.

Chinese economic model is not a pure market economy. There are elements of capitalism mixed with a planned economy, and government regulation is crucial. At the same time, China has successfully developed private property. Essential features of the Chinese model, which led the country to rapid



development, include the one-party governance model that created a belief in the stability of the country, the active participation of the state in the economic development, the orientation of the economy on export, and the creation of special economic zones. The most important resource of China's growth was its huge and inexhaustible population, which provided the market with cheap labor. However, there were consequences to this, such as lower quality of finished products. Another important accelerating factor was that the social policies were unable to keep up with the growth of the economy, which led to some long-term consequences for the population and the environment.

A major component in foreign investments into China was from the ethnic Chinese foreign capital. Foreign corporations played the biggest role in the expansion of production. The conditions for the private local entrepreneurs were at a disadvantage in comparison with the developed countries. They did not have access to loans and were limited by many restrictions. At the same time, foreign companies that did not want to undertake the risks of owning a factory could outsource to China, and the financial risks were assumed by the factories. This created attractive conditions for foreign investments to flow into China.

All of these factors contributed to China's exports growing at a faster rate compared to that of individual wealth within China.

India, similar to China, was decades behind of the entire world in the 20th century. However, when China opened its borders to the rest of the world in 1978, India was stuck in the past and did not open its borders for foreign investments until 1991. After almost 40 years, the level of China's economy has improved significantly, foreign companies have invested more than \$2.7 trillion into China's economy, which is 8 times more than India during the same period, hundreds of thousands of factories were built, and millions of people were put to work. Because of the time gap in opening the borders to the world, India is currently where China was 15 years ago in terms of economic development, infrastructure, and social conditions.

India began its reforms in 1991 during a severe crisis. Prior to this, entrepreneurial activity was severely limited, which negatively affected the local businesses and could not attract any foreign capital. However, since 1991, the monetary unit became partially convertible, a ban on imports was raised, and licensing was canceled. The state had also ceased to control the prices of company shares, and now

companies and investment banks can decide for themselves what price to sell the shares at the IPO.

The growth of innovative companies in the small and medium business sector contributed to the reforms in India, which served as the basis for the growth in the science, technology, and engineering industries. These industries have grown to be the largest industries in India, accounting for most of the country's exports. Compared to China, one of India's advantages was keeping English as one of the official language, where it is used in the publication of official documents. Due to the growth of these industries, the average annual growth rate in India is now more than 5%.

Like China, there is a huge role for government in all spheres in India. Today, it continues to actively attract foreign investments and technologies. It is interesting that, while promoting exports, India is still focused on domestic consumption and growth of import substitution. Due to this, import is limited. The greatest advantage India has over China is its attention to scientific and technological innovations while having sufficiently cheap production costs. India takes a special place in the world due to its large computer and information technology sector, the creation of the software, and, at the same time, qualified services. This is possible primarily due to the high level of the Indian higher education, especially in the sciences.

Its dynamic service sector has brought India several of the world's best private companies in areas with high added value, unlike in China which mostly exports goods with low added value. Companies such as Infosys, Wipro, and TCS compete in the upper echelon of the information technology services worldwide. The huge population of India will still be growing for the foreseeable future, which from one side is a great work source, but at the same time the growth of industries and cities aggravates the problem of the shortage of arable land and fresh water. In terms of pollution and huge consumption of natural resources, including coal, India is in second place just behind China.

### **India's Prospects For Replacing China As The World's Leading Manufacturer Of Goods**

Since the 2008-2009 crisis, some of the producers started returning their production to developed countries or countries in South-East Asia, such as India and Vietnam. These two are China's main competitors in the field of production. Many foreign companies, especially small and medium-sized businesses, began signing contracts only for outsourcing or moved their production to other Asian countries. For example, Adidas closed its last factory



in China in 2012 [4]. The causes for this include the growth of qualified labor and production costs, increase in transportation costs, and difficulties in remote quality control. However, the reasons for these issues lie much deeper.

One of the main reasons is a change in the conditions for foreign companies functioning in China. Since the 1980s, China's laws and regulations provided much more convenient work conditions for registered overseas companies than for domestic private companies. It included significant tax and regulatory exemptions for foreign investors while limiting the opportunities for the domestic private sector and keeping many fields in business closed for domestic companies. This is one reason why many large Chinese corporations, such as Wahaha and Haier, are companies with 100% foreign investments or joint ventures. Many of them are registered in Hong Kong and received huge capital after they went public on the Hong Kong Stock Exchange. But since the mid-2000s, the Chinese government introduced tougher laws for foreign companies, making it harder to operate in China, especially for small and medium businesses.

One of the reasons for this reorientation was the change in the economic model. Previously, the emphasis in the development of the economy had been made on industrial production. However, in recent years, China's leadership is betting on the development of services and domestic consumption. According to the National Bureau of Statistics of China, China's domestic retail sales in December 2014 increased by 11.1% annually. During 2015, retail trade turnover in China, however, increased by 10.7% compared to that in 2014.

China considered a change of an economic model as a necessary step for the further successful development of the economy, because there were many shortcomings and imbalances in the country's development that occurred during the growth through the previous model. Together with several other factors, which will be discussed below, this situation adversely affects foreign investment and the economic forecasts for the foreign companies. The consequence was the outflow of investments from China, especially in light industries, technology production, and pharmaceuticals, where India has always been a major competitor.

Another important disadvantage of the previous Chinese economic model is its dependency on the influx of new cheap labor, which affects the quality of products. The reserve of rural residents in China 30 years ago was abundant, but nowadays the situation has changed. The requirements for the qualification of

labor and the quality of the product produced has also changed, which caused an increase in the cost of skilled labor. Rapid economic growth has pulled a rise in the cost of material, transportation, and salaries of employees. Prices are increasing steadily every year after the Spring Festival, along with employees' salaries.

Together with the previous problem, one should take into account the aging Chinese population. It is one of the most important reasons that will let India surpass China in the long run. The Indian population is young and fast-growing, in contrast to that of China. China's population is expected to peak in 2030, from which it will decrease.

Although the policy of "one family - one child" has been already revoked, it has led to the situation that the number of young people who are coming to China's workforce is less than those who are retiring. The size of the workforce is expected to grow until 2020, from which it will decrease. In the long term, it will be difficult to ensure the rapid growth of the labor force under the constraints and rising wages, as the aging population together with the growth in living standards will result in a large gap in living conditions. India's workforce will continue to grow, while at the same time the birth rate in India falls, meaning that people will have to raise fewer children and more money will be spent on consumption. In this regard, India has great advantages.

The rapid development in China has formed a big gap between eastern and western provinces as well as between urban and rural residents. This has led to a strong gap between the rich and the poor. Social stratification of the Chinese society as a consequence of the reforms is a sensitive issue in the economy. According to the official data of National Bureau of Statistic of China, the Gini coefficient was 48.5 in 2005 and 48.4 in 2007, and has reached a critical level of 49.1 at the time of the 2008 crisis, steadily decreasing to 46.2 in 2015 [5]. However, these estimates are considered by some economists to be sufficiently glamorized. Some Chinese economists and researchers believe that, considering tax evasion, this ratio is much higher. For example, according to the Chinese Household Finance Survey Center of Chengdu's Southwestern University of Finance and Economics in 2012, this ratio was 61, whereas according to the National Bureau of Statistics it was 48.

Another reason for the decrease in the level of investment is a strong drop in the return on investment. The rate of investments as a percentage of the GDP, according to various estimates, is close to

50%. However, the return on investment generally is quite low.

In China, there is a huge excess of capacities that are unused, do not pay off, and deteriorate. This leads to unnecessary costs, excessive competition, and sooner or later causes a reduction in investment and growth slowdown. Rich provinces and large corporations that have been there for decades have achieved great success in the expansion of production. Poor provinces are trying to keep up at any cost. Annual excessive investments have sponsored the excess capacity in the Chinese economy. One of the most striking examples of overproduction and wasteful use of resources is a ghost town of Ordos in Inner Mongolia. The region with the same name is one of the richest in China, with a GDP of \$14,500 per capita. In 2010, Ordos City was ready for 300,000 people to move to, but it's been empty for 7 years. There are perfectly flat straight roads that are washed and cleaned by janitors, new multistory houses with water and electricity, and there is even a beautifully decorated main square for national holidays. However, there are no people. This is not the only example, and this list can be further populated with empty shopping malls, office buildings, and neighborhoods.

There are also many informal approaches to business laws in China. As a consequence, there are very few world-famous national private corporate giants in China. Even a company such as Lenovo, which in 2004 acquired the manufacturing division of IBM, is a company with 100% foreign capital. The owner of Lenovo China is a legal entity of Lenovo Hong Kong, which has invested capital in the Chinese division. So basically, Lenovo is company with Hong Kong's economic model, which is based on a market-based financial system and protection of property and legal rights. At the same time, state-owned companies have strong government support and privileges in China. Most well-known giants are state-owned, either directly, like China Mobile Communications, or through the parent company, which is state-owned.

Lack of proper care for the environment and lack of resources have had, and continue to have, a negative influence on the Chinese economy. Pollution of water, air, and soil is becoming worse. Improving the situation will raise the cost of production and exports and affect growth rates. In the early 2000s it became apparent that the existing growth rate resulted in environmental and social issues and the exhaustion of natural resources. China imports energy resources, and the lack of water and fertile land is becoming more and more serious. Volumes of coal consumption, for example, far exceed the amount that US, Japan or

Western Europe use. It is consumption of coal for production that is a major cause of environmental pollution.

Today, it is very difficult to switch to clean production because China lacks technical resources. Even if the changes in this direction are carried out, these requirements do not have proper control. In the mid-2000s, although the Chinese government decided to improve technology and reorient the economy to a domestic market, the structure of Chinese production made the transition to modern technologies problematic because the greatest profit came from quite primitive and cheap production. Installation of modern resource-saving mechanisms and new technologies, in most cases, would have been too expensive and would not have paid off as the goods produced in China had very low profit margins.

The next important issue, which slows development and increases the gap between the classes, is the social policy, which currently provides weak support for retired and low-income families, expensive medical services, paid education, and low workplace safety regulations.

The severity of the social and environmental problems had been officially recognized in the 3<sup>rd</sup> plenary session of the 18th Central Committee of CPC [6] and was supported in the following sessions [7] when a range of actions to fight against poverty, improve the fight against corruption, relieve state control of tariffs for main resources, increase the access of private capital to some previously prohibited industries, and address various other issues were introduced.

Although holding a relatively low RMB rate helps to export goods, the effect of the loss of government support and foreign capital is already visible. Increasing production costs and competition with countries that have cheaper labor are slowing the exports growth in China, and the growth rate will gradually slow down.

Reducing dependence on exports and the reduction of energy and resources consumption will take more than a few years. According to the official statistics, it is clear that the process of metamorphosis takes place in the economy. There is no crisis in the Chinese economy, but the rates of growth in retail sales and industrial production is much lower than in recent years. According to National Bureau of Statistics of China, growth rate was 6.7% for the first three quarters of 2016, where the GDP reached 53 billion yuan, or 7.87 billion dollars. Though the gross domestic product went up by 1.8 percent in the third quarter on a quarter-by-quarter basis, the pace of

China's GDP growth has slowed down since 2010. In 2010, the GDP was 10.4%, decreasing to 9.2% in 2011, and then to 7.8% in 2012. At the end of 2013, the pace of China's economic growth has slowed to 7.7%, and then to 6.9% in 2015, its lowest level since 1990 [8].

### **Prospects for Economic Growth in China and India**

One of the main engines for progress in China was the exclusive focus of Chinese culture on itself. But after rapid growth and strong expansion, China has reached a point where such an ideology prevents further interaction with the rest of the world. One of the critical issues is the lack of its own technology and dependence on the owners of the technology that they use, directly or indirectly.

It is India's skillfulness in computer sciences that could make India the next world producer. India is the first nation that has built its growth using mental work and not by the extraction of natural resources or primitive production. Companies such as HCL, Wipro, Infosys, and Tata Consulting Services started with inexpensive programming services for foreign companies, entered the international market and quickly took their high places. Tata took the 64th place in the Forbes World's Most Innovative Companies ranking and 10th place among the largest IT services providers measured by revenues. In addition to engineering and sciences, these companies are also engaged in consulting and business outsourcing, and the occupation of high places in world production affects the prices and the structure of the global IT service industry. Due to these companies, India is involved in the development of innovations in various fields, from cars, power generators, and motors to household electronics and pharmaceuticals. India is becoming a competitor to China in world production on a whole new level. Such global giants like IBM, General Electric, Hewlett-Packard, Google and others have large production facilities and offices in India. The Indian branch of IBM has about 150,000 people, a third of the company's global workforce, and is the biggest of its branches.

In other areas of production, India is growing steadily, but is not yet a strong competitor of China due to the lack of established infrastructure and components supply.

China's economic growth is slowing down, and this may reduce consumption. Though China's GDP, in general and by city, had been growing for quite a long time, the level of household income relative to the

average for the country has not grown significantly. A decline in the profitability of commercial activities has caused foreign companies to look elsewhere. However, for the country, it is better not to strive to maintain high profit but to promote and enhance social justice. Redistribution of resources should go along with the fight against corruption. Moreover, to eliminate the dissatisfaction of ordinary people, including small business owners, it is important to limit the abuse by monopolies.

The demographic policy of China has not yet reached a solution to the problem of environmental load. In the future, China will still not have enough water, land, and energy. In addition, the critical issue is the aging of the population, which leads to a decrease in capacity and size of the workforce. Therefore, China has recently relied on domestic consumption rather than on exports, slowly giving its position in manufacturing to India. China has nearly 20 years of holding an unbelievably high level of growth, certainly an incredible feat. Although it has been falling in recent years, it's still very high. For more than 10 years, the growth rate has been around 9% and China's exports have been 10 times greater than that of India. However, in the long term, India will likely be in a stronger position.

According to the World Bank, over the past 10 years, the size of foreign direct investment in India has increased several times from \$7.3 billion in 2005 to \$44.2 billion in 2015. Because of the growing workforce and the declining family sizes, savings rate in India will also continue to increase. Since investments are strongly connected to domestic savings, this will increase investments and economic growth. India has opened, and continues to open, many previously closed sectors to foreign investment, such as real estate, commercial construction, and telecom, attracting foreign investors.

Though Chinese exports is going down, China will remain an export leader for some time in the future because it will take a while for India to establish a competitive level of production, infrastructure, and a well-developed raw materials supply chain. Nevertheless, the production in India is growing rapidly. Chinese companies remain relatively weak in business management and quality control. China is still a country of planned economy where connections are very important. It sticks to old traditions while business management in India is getting better. Indian companies are particularly strong in equipment production, engineering, pharmaceutical production, and telecom. In these fields, India is far ahead of China.

In the upcoming decades, China and India will be among the leading world economies in terms of GDP. China's development rates have been slowing down, with India having more chances to advance to the forefront. At the same time, however, due to the lack

of sufficient economic opportunities, poverty, and lack of political experience, neither of the countries are likely to become world leaders capable of replacing the USA or Western Europe in the near future.

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## MODERN MEDICINE IN UKRAINE: REALITIES, PROBLEMS AND WAYS OF ITS IMPROVEMENT

### **Abstract**

*Population health is one of the social indicators of public progress, economic growth potential and security of the state, and occupies a leading position in the value system of any civilized country. One of the important components of the strategic planning of the state policy in healthcare is the tendency of morbidity and prevalence of the diseases among the population. In Ukraine health of the population is getting worse every year, it requires the development of a new medical paradigm providing right approaches to the health support and treatment. The authors note that in order to change from the current situation to better it is necessary, firstly, that the modern medical community should accept as an axiom of its activities predictive, preventive, personalized, participatory, precision medicine.*

*The most important moment in the addressing of this issue is the radical transformation of the existing medical education system, training of highly qualified scientific and pedagogical staff because a functioning today conservative and insufficiently mobile system of higher medical education does not completely meet today's challenges and requirements in its ideology, form, content and final results and so can not provide proper training of a new generation of specialists. The departments and later the faculties on the basis of the state leading medical universities can implement and develop this strategy. Secondary, the development of health insurance is an important step in the establishment and improvement of medical aid to the population of Ukraine. These ways out of existing situation will require serious efforts from the state, but they will be rewarded by the decrease of morbidity, improvement of the life quality and increase of duration of the healthy life of the Ukraine population.*

**Key words:** Ukraine, 5 P medicine, insurance medicine.

Population health is one of the social indicators of public progress, economic growth potential and security of the state, and occupies a leading position in the value system of any civilized country. The state of population health is influenced by a number of socio-economic, environmental, biological and other factors [3; 15].

One of the important components of the strategic planning of the state policy in healthcare is the tendency of morbidity and prevalence of the diseases among the population [3]. An analysis of the official statistics in Ukraine (table 1) showed that in 2015 year as compared with 2014 year there was an increase of the diseases prevalence index among the population,

and the population morbidity index in 2015 year remained almost at the level of 2014 year. There was a tendency to decrease the indexes of the diseases prevalence and the morbidity of the population of Ukraine during the 2011-2014 years [15].

Among the population of Ukraine in the structure of the diseases prevalence there were on the first place the circulatory system diseases (31.0%; 52956.9 per 100000 of the corresponding population); on the second place – the respiratory system diseases (19.8%; 33952.9); on the third place – the digestive system diseases (9.9%; 16998.1); on the fourth place – the urinary system diseases (5.5%; 9382.3); on the



fifth place – the musculoskeletal system and connective tissue diseases (5.4%; 9301.8) [15].

It would seem that all diseases have to retreat in front of the modern medicine achievements, but the

analysis of the population health in Ukraine has shown that as a whole it did not improve, and unfortunately according to some indicators it even deteriorated [8].

**Table 1**

**The indexes of the diseases prevalence and the morbidity of the population of Ukraine over the period from 2011 to 2015 years (per 100000 of the corresponding population)**

Index	Year				
	2011	2012	2013	2014	2015
The diseases prevalence	187089.0	185462.7	185650.9	170128.0	171096.7
The morbidity of the population	71013.7	68558.1	68376.9	62654.2	62651.3

*Source: [15].*

In Ukraine there is a lifetime reduction as a result of the population health deterioration. Ukraine lags behind most developed countries considering the population lifetime indexes [15]. According to the Bible, Noah’s grandfather, Methuselah lived 969 years. It is very difficult to believe in this fact. It is much easier to accept that according to the gerontologist’s calculations the human body biological resource is not less than 120 years. Paracelsus believed that a person can live for 600 years. I. Mechnikov and A. Bogomolets talked about 160 years. But how many will live for at least 100 years? The vast majority of us do not live 60-80 years up to our natural limit, this fact characterizes today’s medicine quite pessimistically, and it is hardly can be designated as «healthcare»: modern medicine does not protect human health. Modern medicine is the medicine of «repair», medicine of pills and scalpel [11].

The current classical medicine is the medicine of the field of battle, when a doctor has one task is saving a person’s life, even if the cost of it is a complete or partial loss of health. People appeal to the classical medicine only when the pronounced symptoms of any disease appear in them [8]. This is not the fault of the medicine organizers and, especially, practicing physicians. This fact has developed historically. The basic medical care paradigm had to be of such kind during many centuries [10]. So, today’s vector of medicine development leads to the dead end. Modern medicine requires a new medical paradigm, providing a new approach to the health support and treatment.

The development of so-called «4P medicine» (predictive, preventive, personalized, participatory) which is recognized the most effective nowadays [4; 13]. National Institute of Health has

included this specified way of development in the priorities of medicine development in this century, it has been actively supported by the European Commission too [14].

Predictive medicine is aimed at the early detection of the hereditary predisposition of human to diseases that can allow timely holding of preventive measures to diseases development, improve the health status, enhance the life quality and increase the life active period duration [13]. The main tasks of modern molecular biology and medicine are the development of new genomic markers having predictive, therapeutic and prognostic significance. Specific markers show person’s predisposition to a particular disease. The widespread application of such techniques can identify the risk groups for which the complex of early preventive measures should be developed. These genomic risk markers may be also identified even in the perinatal period which allows to determine the risk of the development of many diseases and so to increase the potential effectiveness of prevention programs. Thus the integrative system of the predictor genomic markers can help to assess of risk predisposition to various diseases of future generations [1].

Carrying out preventive and corrective measures long before the disease development but not waiting for the disease manifestation these are the principles of preventive medicine [8]. Preventive medicine is aimed at preserving the health of healthy people and improvement of their life quality. Traditional medicine also carries out preventive measures, which are limited only to preventive examinations, which, unfortunately, are episodic and sometimes formal.

Personalized (individual) medicine is a medical model, according to which all decisions about the appointment of medical drugs and diagnostic procedures should be tailored to the individual patient, adjusted for his/her genetic characteristics or other information about the patient [16].

The approaches of current classical medicine are designed primarily at the studies of various methods of treatment and diagnosis on large groups of patients with the same type of pathology. These approaches do not give the answers to the questions: how to treat the patient, if the drug that helps the statistical patient does not help him; what to do if the drug that helps the statistical majority of patients in the particular patient shows only its own side effects? [1]

The disease is considered as the dynamic process, that's why not only the period of the disease but also the period preceding the disease («before the disease») and the period «after the disease» are singled out. The period «before the disease» is divided into the period of pre-disease and the period of preclinical manifestations (latent period) [6].

Let us hope that predictive, preventive and personalized medicine will focus the attention on the period «before the disease», it will help to stabilize the morbidity and mortality, reduce the disability of the working population [12], however nowadays on the current classical medicine is the period of the disease. The calculations show that the persons who are under the regular surveillance, allowing to detect abnormal changes on the preclinical stages of the disease and take measures to timely elimination of these changes get at least 8-15 more years of active work capacity [5].

Participatory medicine implies that the patient is the participant of the process. The doctors inform the patient, help to make a choice, instruct him/her and care about him/her. The scientists have identified a participatory medicine for expressing the specifics of the personal approach, which is implemented in patients right and ability to participate in making the most important medical decisions affecting them. In the theoretical bioethics this conception is represented in the principle of autonomy [7].

Active implementation in practice of «4P medicine» model is possible due to the genomics, proteomics, metabolomics and bioinformatics achievements which allow the creation in the biological structures of human body the conditions for visualization the lesions, hidden from the doctor eyes [9].

Genomics studies the general principles of the genomes construction and functioning, DNA structure is analyzed using the sequencing and the analysis of genetic polymorphisms which ultimately allows designing the algorithms of «4P medicine» and identifying the pharmacotherapeutic targets with the creation on their basis the means of the preventive gene therapy. The methods of individual identification of proteins and the antigenic determinants (epitopes) in their composition play a fundamental role in proteomics. Metabolomics illustrates the functional state of the cell at the level of its metabolism in real time necessitating the use of the term «metabolome» reflecting the aggregate of all metabolic pathways in the cell [5; 11]. Bioinformatics using the most modern mathematical modeling methods will help to understand in general the data of metabolomics, genomics and proteomics [5].

It was announced about the development of precision medicine in the United States in 2015 year, so some scientists have proposed a new term – «5P medicine». The purpose of precision medicine is to develop the treatment methodology that takes into account the documented history of the patient, information about his/her genetic peculiarities, social status and other data from a variety of sources including mobile devices and applications [14].

Mobile health care is used in precision medicine and combines two directions developing simultaneously and having significant influence on each other (the first direction is the technologies for patients treatment and care, the second one is devices for monitoring human health) [14].

The current situation in Ukraine dictates the necessity of improvements in the current health care system which should be based on the study of European countries experience. For example, the system of family medicine operates in the Netherlands. The main directions of the family medicine system functioning are the stable national education system, the development of family medicine, the increase of the family doctors national association functions, strengthening of the nongovernmental organizations role in the promotion of family medicine. The promotion of a healthy lifestyle takes the first place in the family doctor work in the Netherlands. The Netherlands health care system does not finance, but only oversees the family medicine work. All financial transactions are carried out by the insurance companies. Medical insurance of the population is mandatory and amounts 10% of total revenue at income of 32.6 thousand Euros a year [2].

In France insurance medicine takes the main place in the health care organization. Every Frenchman pays 8% of salary to the insurance fund. Any reference to the medical institution is paid by 20% by the patient and 80% by the insurance fund. French health care system is under state control. The state health care sector is the controlling entity, which monitors the activities of health care directorate, directorate of hospitals and directorate of social insurance. Every Frenchman carefully monitors his own health and does not save on the disease prevention and means that ensure a healthy lifestyle [2].

Austrian ministry of health care adopted a policy of preventive medicine as evidenced by the obligatory medical examination of persons who have reached the age of eighteen. Special services that are integrated into the social security system were established in order to control carrying out of preventive examinations. A multidisciplinary system of social insurance operates in Austria so 98% of the populations are covered by medical social insurance. The social insurance systems are funded by the contributions of the insured population, or employers [2].

Germany refers to high-quality medical care countries. Medical insurance system of Germany is based on the functioning of the private insurance funds and the state obligatory insurance. The state obligatory

insurance covers approximately 89% of the population, while private insurance have only 9% of the population. The government oversees the compliance of the medical funds actions with the current legislation, but is not directly involved in the medical care organization [2].

Thus, the modern medical community in Ukraine, firstly, should recognize and accept as an axiom of its activities predictive, preventive, personalized, participatory and precision medicine. The most important moment in the addressing of this issue is the radical transformation of the existing medical education system, training of highly qualified scientific and pedagogical staff because a functioning today conservative and insufficiently mobile system of higher medical education does not completely meet today's challenges and requirements in its ideology, form, content and final results and so can not provide proper training of a new generation of specialists. The departments and later the faculties on the basis of the state leading medical universities can implement and develop this strategy. Secondary, the development of health insurance is an important step in the establishment and improvement of medical aid to the population of Ukraine. These ways out of existing situation will require serious efforts from the state, but they will be rewarded by the decrease of morbidity, improvement of the life quality and increase of duration of the healthy life of the Ukraine population.

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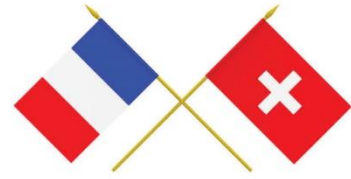
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**THE GENEVAN FUNDS: A CROSS BORDER OPPORTUNITY?**

**Abstract**

*More and more French and Swiss citizens who live in France, work in Switzerland, and so, cross the border every day. If they work in the canton of Geneva, they pay taxes on wages to the canton administration due to the "withholding taxes system" implemented in this canton. Due to the fact, they benefit from the French public services such as schools, hospitals, infrastructures and security, the canton of Geneva pays a grant every year to the French Government as a compensation.*

*Today some voices say that the system is not adapted. First because the French Government transfers all the grants to the local governments when the taxes on wages are targeted to the State, in France and when also the border workers pay local taxes to the French local Government. But today some Swiss politicians estimate that the compensation is disseminated to all the cities having a border worker, even when the city (or village) is situated 150 km from Geneva and so it may be qualified as sprinkling. In addition, criticisms are made on the use of these funds, for local fantasies, often far from the initial idea which was to strengthen cross border infrastructures.*

*On the other hand, some analysts say that this system is must cheaper for Switzerland than it is in other regions, when the tax is paid where you live. In addition, the grants are used more and more for structural cross border projects, mainly in the field of transport, which represent a benefit for the both countries. The debate is far to be ended...*

**Key words:** *cross border cooperation, local investments, financing local infrastructures, withholding tax.*

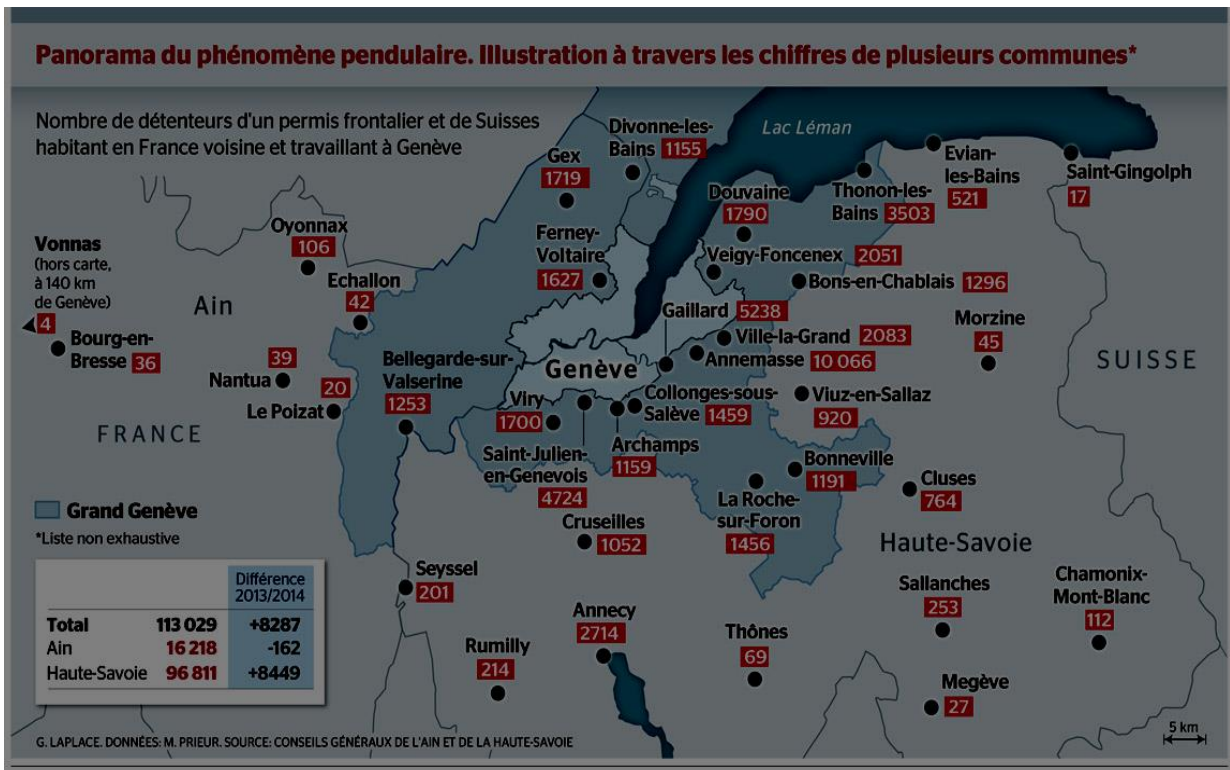
More than 110 000 workers cross the Franco Swiss border every day for working as so called «cross-borders commuters» in the canton of Geneva. Most of them are French but also some are Swiss. This is a consequence of the economic dynamism of Switzerland, but also of the high cost of the life in that country, particularly for housing.

These workers produce richness in one country and benefit from the public services in the other.

As a result, as it exist between most of the European countries who have a common border, agreements have been concluded for solving tax issues.

Two systems exist. The first is to make workers to pay their taxes where they live, then the country where they live pays a compensation to the country where they work. This system is in course between France and most of Switzerland cantons.





*Picture 1. Panorama of pendula phenomenon. Illustration across the figures of several villages. Source: G. Laplace. Données: M. Prieur. Conseils Généraux de l'Ain et de Haute-Savoie.*

The second, which is exactly the opposite, is the solution adopted between France and the canton of Geneva through the treaty signed on 29<sup>th</sup> January 1973, (based on the model convention of OECD) because the canton has adopted the system of «Tax paid at source» which implies that all the workers (excepted those of the international organisation) pay directly the taxes on wages to the tax administration of the canton.

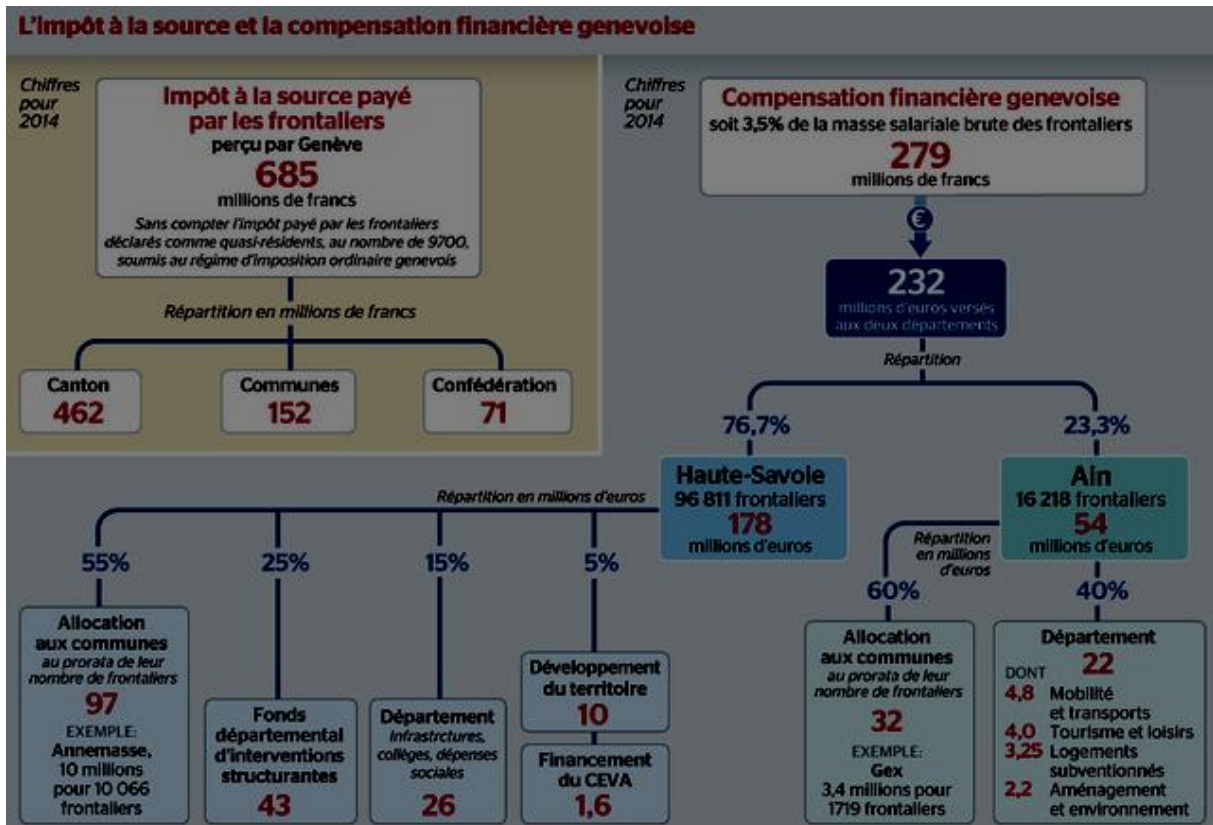
So, the canton of Geneva has decided to pay a compensation to the counties (departments) of Ain and Haute-Savoie, «in consideration of the public charges which they bear on account of their inhabitants working in Geneva». This system has been implemented through the Treaty signed in 1973 between France and Switzerland, which creates the «Compensation financière genevoise» (CFG<sup>1</sup>) confirmed by the tax convention passed in 11<sup>th</sup> April 1983.

The amount of the compensation is calculated as 3,5 % of the gross wages bill paid to the «cross-border commuters». The canton has received, through the «tax paid at the source» system 9,5 bln of Swiss Francs (SF) between 2000 and 2014. Among them, Geneva has retroceded 2,7 bln SF to France. In 2014, Switzerland has retroceded 279 mln SF from 685 mln it perceived through the «tax paid at the source».

The funds are paid annually by the Genevan canton to the French State (Ministry of Interior) which reverse the funds to the counties: 23.3 % for the county of Ain and 76.7 % for the county of Haute-Savoie<sup>2</sup>. Each county is free to reverse then the funds to the local governments belonging to its territory. The practice is that the funds are divided into several envelopes devoted to targets such as the communes, a fund for the development of the territory of the county, and for the current operating expenses of the county.

<sup>1</sup>Generally called «Fonds Genevois».

<sup>2</sup>This distribution has changed during the period.



Picture 2. Tax at source and financial Genevan compensation.

Source: Conseils Généraux de l'Ain et de Haute-Savoie.

Table 1

The amount of the CFG has increased each year

En M€	2009	2010	2011	2012	2013	2014	Evolution	Average annual change
Ain	29.52	30.94	40.30	45.59	46.32	50.54	71 %	11.9 %
Haute-Savoie	97.98	127.61	144.38	152.49	166.36	177.86	81.5 %	12.7 %
<b>CFG totale</b>	<b>127.5</b>	<b>158.55</b>	<b>184.68</b>	<b>198.08</b>	<b>212.68</b>	<b>228.4</b>	<b>79.1 %</b>	<b>12.4 %</b>

Source: Counties of Ain and Haute-Savoie.

These amounts are a big chance for the counties of Ain and Haute-Savoie who benefit for an additional amount of grants compare with other French departments, even those where a lot of inhabitants work out of the border.

In France, the most important part of the resources of the local governments come from on the one hand the State whose transfers represent 100 bln € or 43 % of the total resources, and on the other hand by local taxes which represent a total amount of 128,5 bln €,

or 55 % of the total resources.

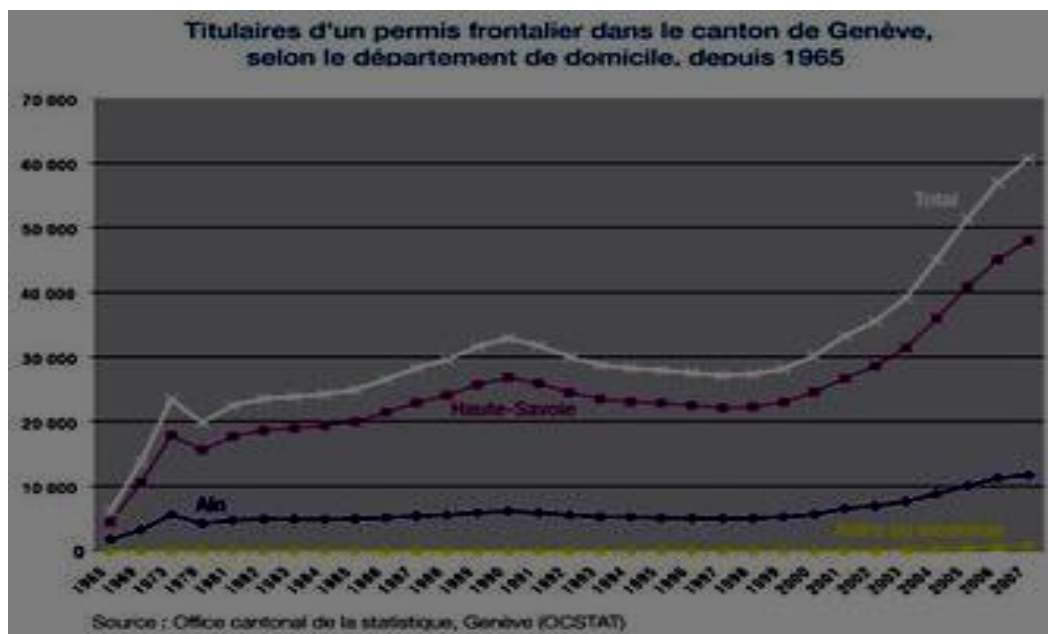
However, one has to consider that the people, who work in Switzerland but live in France, pay the local taxes to the French local governments. And these local governments benefit from transfers from the State without any reduction resulting from the fact some of their inhabitant work abroad. Consequently, the gap is for the State only, but not – as a significative manner – for the local governments.

There is a debate in Switzerland, where the system is considered as a «cadeau royal» by the Movement of Genevan citizens<sup>3</sup> (MCG). The leaders of this organisation point out the multiplication of projects of small importance, having little structuring interest (the renovation of the aquatic center of Annemasse e.g.) but to satisfy officials from small local governments and sometimes very far from the employment basin of Geneva.

They consider that the origin goal of the 1973 treaty which was devoted exclusively to compensate the additional expenses charged to the French local governments due to the cross border transfers transports has been diverted to projects having little links with transport infrastructure.

For some very little villages, the grants are so important compared to the total amount of the budget, that it may be dangerous for the future. E.g. in the village of Savigny were live 750 inhabitants and among them 230 commuters, the grants represent quite 40 % of the budget. It is used for financing social habitations of schools but it makes the village extremely dependent from this source of revenue.

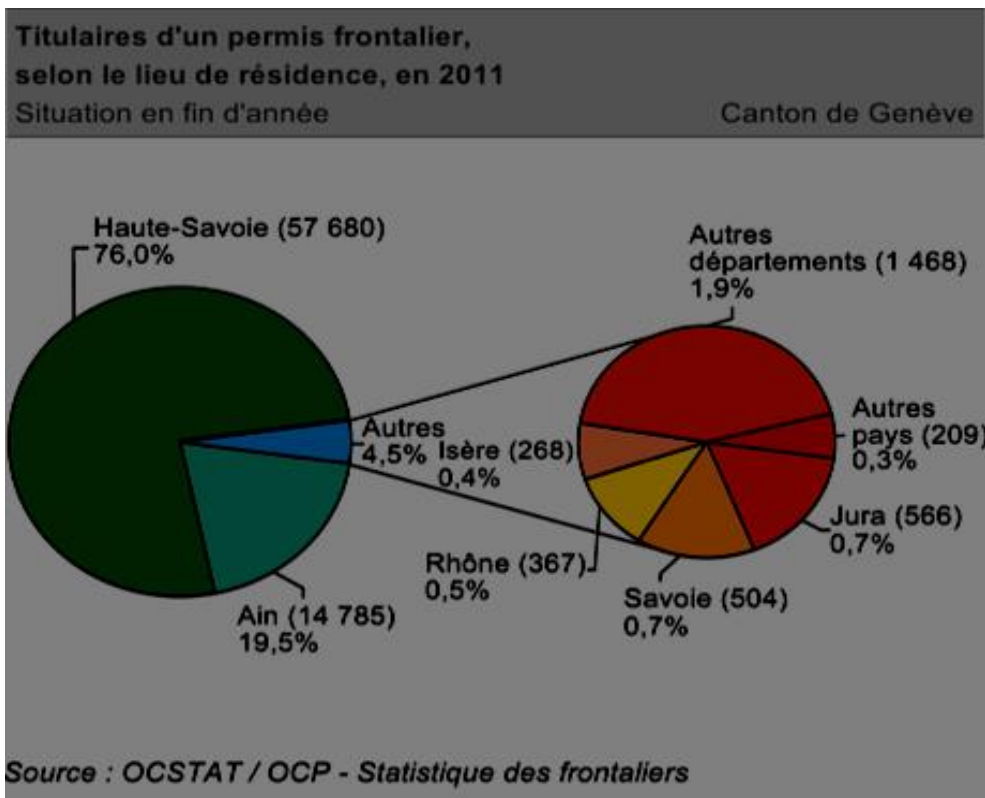
Other politicians say that actually, the cross-border commuters come from a still more and more long distance and some little projects are important to strengthen the attractiveness of communes that these workers have to choose to live. In fact, it has been found that 112 commuters come from Chamonix, 4 in Vonnas (140 Km from Geneva) and one in Saint-Laurent sur Saône (150 Km from his business location).



**Picture 3. Number of holders of a border license in the canton of Geneva, according to the department of home, since 1965.**

*Source: Office cantonal de la statistique, Genève (OCSTAT).*

<sup>3</sup> See: Golay: «Les cadeaux à la France, c'est fini»



*Picture 4. Number of holders of a border license in the canton of Geneva, according to the department of residence, in 2011.*

*Source: Office cantonal de la statistique, Genève (OCSTAT).*

Some say also that the GF have now a leverage effect for cross-border initiatives. In the county of Ain, 60 % of the funds are targeted to structuring projects, mainly in the field of cross-border transports: the «high-level service bus» of Gex-Ferney, the tramway of Saint-Genis and many others. In Haute-Savoie, 51 millions of SF were targeted to projects such as the rail link between Cornavin (Switzerland) and Annemasse (France).

In addition, one has to take into consideration that when a commuter living in France, works in another Swiss canton, he pays his taxes in France, according to the Franco-Swiss tax agreements. Then France reverse to Switzerland an amount corresponding to 4,5 % of the gross wages bill of cross-borders commuters. Compared with the 3,5 % that the canton of Geneva reverse to France, that shows that the 1973 treaty is largely favourable to the Geneva canton.

Each year the prefects of Ain and of Haute-Savoie, as representative of the French State, and the head of the Swiss State Council, have a meeting where the French part makes a presentation of the use of the funds. However, in Switzerland some politicians ask for a

revision of the 1973 treaty permitting the creation of a bilateral fund dedicated to structural cross border operations only.

If the creation of such a bilateral fund seems to be a good idea, particularly in order to strengthen cross border cooperation, some conditions should be solved through the new treaty.

First, having in mind that at the origin, the «Fonds Genevois» were only dedicated to compensate French expenses in the field of transport infrastructures, as defined in the treaty of 1973, one must consider that the amount of the funds should be largely increased if the projects financed are profitable both to Switzerland and France.

In addition, the bilateral fund should be managed by a bilateral commission who would have to agree on a pluriennial strategy, where the benefits for each part should be clearly identified, and evaluated, as it is in any cross border cooperation strategy.

For that purpose, the «Observatoire statistique transfrontalier de l'espace franco-valdo-genevois»

founded in 2011 by the canton of Geneva, France and some local governments, jointly with the «Office de statistique cantonal (OCSTAT) and INSEE (France statistic office) should be mobilized.

The «Fonds Genevois» are a specificity which has been satisfying for a long time. If criticisms occur today, it must be taken into consideration the benefits it brings for French local governments and for the Geneva canton as well. This experience should be

compared with other provisions adopted between European member states having a common border. For that purpose a particular attention should be paid to the Report of the Federal Council of Switzerland dated 16<sup>th</sup> June 2011. Above all, there would be high advantage to include the management of the funds through a cross-border cooperation policy. The French institution «MOT» (Mission opérationnelle transfrontalière) has a strong experience in that field.

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## INDIAN EDUCATION SYSTEM: CHALLENGES AND REFORMS

### **Abstract**

*Education is one of the most powerful instruments for reducing poverty and inequality and lays a foundation for sustained economic growth. Education is equally key to enhance India's competitiveness in the global economy. Therefore, ensuring access to quality education for all, in particular for the poor and rural population, is central to the economic and social development of India. Having improved access, India is now seeking to upgrade the quality of education provided and improve levels of learning. It is also seeking to bring the remaining 8 million or so out-of-school children into school. Most of these children belong to marginalized communities or live in far flung rural communities. The country is also seeking to ensure that all those enrolled are retained in school till they complete their elementary education.*

*India faces many challenges that could be tackled through the education system. For one gender issues have come to the fore. Changing gender mindsets seems to be imperative and gender studies education is one way of doing so. Also India, along with most countries, is concerned with the future of the labor market and employability. Many of India's concerns about education are ensuring quality, improving teacher capabilities, effective use of technology, and improving management systems. Building upon the existing capacities and recognizing the immense contribution to nation building that the large network of educational institutions has made in the post independent India; the country has embarked upon a second phase of expansion and establishment of centres of excellence in higher education. It is envisioned that strengthening the two ends of the spectrum, namely, elementary education and higher/technical education would help in meeting the objectives of expansion, inclusion and excellence in education.*

*The main objective of this article is to present a glimpse of Indian education, various programs and schemes for nationalization and universalization of education. The article also depicts the importance of child education and the different challenges and issues faced by Indian education, following the essential steps to reform modern education for internationalization.*

**Key words:** *education, public institutions, technology, progress, reforms.*

The modern school system was brought to India, including the English language, originally by Lord Thomas Babington Macaulay in the 1830s. The curriculum was confined to "modern" subjects such as science and mathematics, and subjects like metaphysics and philosophy were considered unnecessary. Teaching was confined to classrooms and the link with nature was broken, as also the close relationship between the teacher and the student.

Universal and compulsory education for all children in the age group of 6-14 was a cherished dream of the new government of the Republic of India. This is evident from the fact that it is incorporated as a directive policy in article 45 of the constitution. But this objective remains far away even more than half a century later. However, in the recent past, the government appears to have taken a serious note of this lapse and has made primary education a

Fundamental Right of every Indian citizen. The pressures of economic growth and the acute scarcity of skilled and trained manpower must certainly have played a role to make the government take such a step. The expenditure by the Government of India on school education in recent years comes to around 3% of the GDP, which is recognized to be very low [1].

India is divided into 28 states and 7 so-called “Union Territories”. The states have their own elected governments while the Union Territories are ruled directly by the Government of India, with the President of India appointing an administrator for each Union Territory. As per the constitution of India, school education was originally a state subject—that is, the states had complete authority on deciding policies and implementing them. The role of the Government of India (GoI) was limited to coordination and deciding on the standards of higher education. This was changed with a constitutional amendment in 1976 so that education now comes in the so-called *concurrent list*. That is, school education policies and programmes are suggested at the national level by the GoI though the state governments have a lot of freedom in implementing programmes. Policies are announced at the national level periodically. The Central Advisory Board of Education (CABE), set up in 1935, continues to play a lead role in the evolution and monitoring of educational policies and programmes [1].

There is a national organization that plays a key role in developing policies and programmes, called the National Council for Educational Research and Training (NCERT) that prepares a National Curriculum Framework. Each state has its counterpart called the State Council for Educational Research and Training (SCERT). These are the bodies that essentially propose educational strategies, curricula, pedagogical schemes and evaluation methodologies to the states' departments of education. The SCERTs generally follow guidelines established by the NCERT. But the states have considerable freedom in implementing the education system.

The school system in India has four levels: lower primary (age 6 to 10), upper primary (11 and 12), high (13 to 15) and higher secondary (17 and 18). The lower primary school is divided into five “standards”, upper primary school into two, high school into three and higher secondary into two. Students have to learn a common curriculum largely (except for regional changes in mother tongue) till the end of high school. There is some amount of specialization possible at the higher secondary level. Students throughout the country have to learn three languages (namely, English, Hindi and their mother tongue) except in

regions where Hindi is the mother tongue and in some streams as discussed below.

There are mainly three streams in school education in India. Two of these are coordinated at the national level, of which one is under the Central Board of Secondary Education (CBSE) and was originally meant for children of central government employees who are periodically transferred and may have to move to any place in the country. A number of “central schools” (named Kendriya Vidyalayas) have been established for the purpose in all main urban areas in the country, and they follow a common schedule so that a student going from one school to another on a particular day will hardly see any difference in what is being taught.

The second central scheme is the Indian Certificate of Secondary Education (ICSE). It seems that this was started as a replacement for the Cambridge School Certificate. Now a large number of schools across the country are affiliated to this Council. All these are private schools and generally cater to children from wealthy families.

Both the CBSE and the ICSE council conduct their own examinations in schools across the country that are affiliated to them at the end of 10 years of schooling (after high school) and again at the end of 12 years (after higher secondary). Admission to the 11th class is normally based on the performance in this all-India examination. Since this puts a lot of pressure on the child to perform well, there have been suggestions to remove the examination at the end of 10 years.

There are a relatively small number of schools that follow foreign curricula such as the so-called Senior Cambridge, though this was largely superseded by the ICSE stream elsewhere. Some of these schools also offer the students the opportunity to sit for the ICSE examinations. These are usually very expensive residential schools where some of the Indians working abroad send their children. They normally have fabulous infrastructure, low student-teacher ratio and very few students. Many of them have teachers from abroad.

Each state in the country has its own Department of Education that runs its own school system with its own textbooks and evaluation system. As mentioned earlier, the curriculum, pedagogy and evaluation method are largely decided by the SCERT in the state, following the national guidelines prescribed by the NCERT. Each state has three kinds of schools that follow the state curriculum. The government runs its own schools in land and buildings owned by the

government and paying the staff from its own resources. These are generally known as *government schools*. Then there are privately owned schools with their own land and buildings. The third kind consists of schools that are provided grant-in-aid by the government, though the school was started by a private agency in their own land and buildings. The grant-in-aid is meant to help reduce the fees and make it possible for poor families to send their children.

India's improved education system is often cited as one of the main contributors to its economic development. Much of the programs especially in higher education and scientific research have been credited to various public institutions.

While enrolment in higher education has increased steadily over the past decade, reaching a Gross Enrolment Ratio of 24% in 2013, there still remains a significant distance to catch up with tertiary education enrolment levels of developed nations, a challenge that will be necessary to overcome in order to continue to reap a demographic dividend from India's comparatively young population.

As per the Annual Status of Education Report (ASER) 2012, 96.5% of all rural children between the ages of 6-14 were enrolled in school. This is the fourth annual survey to report enrolment above 96%. Another report from 2013 stated that there were 22.9 Crore students enrolled in different accredited urban and rural schools of India, from Class 1 to x11, representing an increase of 23 Lakh students over 2002 total enrolment, and a 19% increase in girl's enrolment while quantitatively India is inching closer to universal education, the quality of its education has been questioned particularly in its government run school system. Some of the reasons for the poor quality include absence of around 25% of teachers every day. States of India have introduced testes and education assessment system to identify and improve such schools.

The Indian government lays emphasis on primary education, also referred to as elementary education, to the education aged 6 to 14 years old. Because education laws are given by the states, duration of primary school visit alters between the Indian states. The Indian government has also banned child labor in order to ensure that the children do not enter unsafe working conditions. However, both free education and the ban on child labor are difficult to enforce due to economic disparity and social conditions, 80% of all recognized schools at the elementary stage are government run or supported, making it the largest provider of education in the country.

The District Education Revitalization program was launched in 1994 with an aim to universalize primary education in India by reforming and vitalizing the existing primary education system. 85% of the DERP was funded by the central government and the remaining 15% was funded by the states. The DERP, which had opened 1.6 lakh new schools delivering alternative education to approximately 35 lakh children, was also supported by UNICEF and other international programs. In January 2016, Kerala became the 1<sup>st</sup> Indian state to achieve 100% primary education through its Literacy program Athulyam. The current scheme for universalization of Education for all is 'Sarva Shiksha Abhiyan', which is one of the largest education initiatives in the world. Enrolment has been enhanced, but the levels of quality remain low.

A significant feature of India's secondary school system is the emphasis on inclusion of the disadvantaged sections of the society. Professionals from established institutes are often called to support in vocational training. Another feature of India's secondary school system is its emphasis on profession based vocational training to help students attain skills for finding a vocation of his/her choosing. A significant new feature has been the extension of SSA to secondary education in the form of the 'Rashtriya Madhyamik Shiksha Abhiyan'.

A special Integrated Education for Disabled children (IEDC) program was started in 1974 with a focus on primary education, which was converted into Inclusive Education at secondary stage. The National Policy on Education (NPE), 1986, has provided for environment awareness, science and technology education, and introduction of traditional elements such as Yoga into the Indian secondary school system. India's higher education system is the third largest in the world, after China and the United States. As of 2012, India has 152 central universities, 316 state universities, and 191 private universities. Other institutions include 33,623 colleges, including 1800 exclusive women's colleges, functioning under these universities and institutions, and 12,748 institutions offering Diploma courses. The emphasis in the tertiary level of education lies on science and technology. Distance learning is also feature to the Indian higher education system.

India offers one of the largest of pool of technically skilled graduates in the world. Given the sheer numbers of students seeking education in engineering ,science and mathematics ,India faces daunting challenges in scaling up capacity while maintain quality. India's All India council of Technical Education (AICTE) reported, in 2013, that there are

more than 4599 vocational institutions that offer degrees, diploma and post diploma in architecture, engineering, hotel management, infrastructure, pharmacy, technology, town services and others.

Three Indian universities were listed in the Times Higher Education list of the world's top 200 universities-Indian Institutes of Technology, Indian Institute of Management and Jawaharlal Nehru University in 2005 and 2006. All India institute of medical sciences has been recognized as a global leader in medical research and treatment. The University of Mumbai was ranked 41 among the top 50 Emerging schools of the world by America's news broadcasting firm Business Insider in 2012. And was the only university in the list from the five emerging BRICS nations. It was ranked 62 in the QS BRICS University ranking for 2013 and was India's third best Multi-Disciplinary Universities.

The UGC has inter- universities Centre's at number of locations throughout India to promote common research, for e.g. the Nuclear Science center at the Jawaharlal Nehru University, New Delhi.

### Challenges and issues of Indian Education

As per the population census of India 2011, the literacy rate of India has shown an improvement of almost 9%. It has grown up 74.24% 2011 from 65.38% in 2011. It consists of male literacy rate 82.14% and female literacy rate is 65.46%. Kerala with 93.9% literacy rate is the top state in India. Majority of states of India have shown major science of improvement in there over all literacy rate does contributing towards a literate nation.

India is set to be passing through a great dichotomy. The country has got some excellent Education institutions. But the quality across the country is uneven. The problems that the confront education today are low rates of enrolment, unequal access, poor quality of infrastructure and lack of relevance.

- Another challenge that confronts India is in the disparities in access to education, especially in terms of economic class, gender, caste and ethnic and religious belonging.
- The expansion of the private self-financing education sector, with its aim of commercial intent, has been another reason for the propagation of disparities.
- In terms of expenditure incurred on education, particularly on higher education, during the year 2010-11, the government spent around Rs.15,440

Crore which is about 85% of the revised budget estimates of the year. Measuring the expenses on education as a percentage to GDP, India lags behind some developed/developing nations.

**Table 1**  
**Expenditure on education**

Country	Spending on education as a % GDP
Switzerland	5.8
U.S	5.7
France	5.6
U.K	5.3
Malaysia	8.1
Mexico	5.3
South Africa	5.3
Thailand	5.2
Chile	4.2
Brazil	4.2
India	4.1
Russia	3.8

*Source: United Nations Human Development Program.*

- Another challenge for improving the Indian education system is to improve the student-teacher ratio. In India, this ratio is very high as compared to certain comparable countries in the world. For example, while in developed countries this ratio stands at 11.4, in case of India, it is as high as 22.0. It is even low in CIS Common wealth of Independent States (10.9), Western Asia (15.3) and Latin America (16.6). This brings the necessity to recruit quality teachers and strengthen the teachers required handle classes.
- In order to improve the skills and talent of large populace, there is a need for raising the quality and standards of education system. At present, there is no compulsion for institutions/colleges to get accreditation in India. Government has already mooted a proposal to introduce accreditation. Standard rating agencies are required to give accreditation to universities/colleges/schools. However, a positive development is that high ranked Indian Schools possess faculties with doctoral qualifications and of global standards who can deliver quality education to the students.



## Ministry of Human Resource Development

The essence of Human Resource Development is education, which plays a significant and remedial role in balancing the socio-economic fabric of the Country. Since citizens of India are its most valuable resource, our billion-strong nation needs the nurture and care in the form of basic education to achieve a better quality of life. This warrants an all-round development of the citizens, which can be achieved by building strong foundations in education. Currently, the MHRD works through two departments [9]:

- Department of School Education & Literacy
- Department of Higher Education

While the Department of School Education & Literacy is responsible for development of school education and literacy in the country, the Department of Higher Education takes care of what is one of the largest Higher Education systems of the world, just after the United States and China.

The Department of School Education & Literacy has its eyes set on the “universalisation of education” and making better citizens out of our young brigade. For this, various new schemes and initiatives are taken up regularly and recently, those schemes and initiatives have also started paying dividends in the form of growing enrolment in schools.

The Department of Higher Education, on the other hand, is engaged in bringing world class opportunities of higher education and research to the country so that Indian students are not finding lacking when facing an international platform. For this, the Government has launched joint ventures and signed Memorandums of Understanding to help the Indian student benefit from the world opinion.

The main objectives of the Ministry are the following:

- Formulating the National Policy on Education and to ensure that it is implemented in letter and spirit.
- Planned development, including expanding access and improving quality of the educational institutions throughout the country, including in the regions where people do not have easy access to education.
- Paying special attention to disadvantaged groups like the poor, females and the minorities.

- Provide financial help in the form of scholarships, loan subsidy, etc to deserving students from deprived sections of the society.
- Encouraging international cooperation in the field of education, including working closely with the UNESCO and foreign governments as well as Universities, to enhance the educational opportunities in the country.

## World Bank Support

Since 2000, the World Bank has committed over \$2 billion to education in India. It has also provided technical support. Assistance includes:

- **Elementary/Primary education:** Since 2003, the Bank has been working with Central and State governments, along with development partners (UK's DFID and the European Union) to support the [Sarva Shiksha Abhiyan](#) program.
- In Phase 1 (2003-2007) the World Bank invested \$ 500 million to expand facilities and improve infrastructure, get children to school, and set up a system to assess learning.
- In Phase 2 (2007-2012) the World Bank provided a total of \$1.35 billion to expand access to upper primary education, increase retention of all students until completion of elementary education (Grade 8), and improve learning levels.
- In addition, World Bank evaluations and research provided pointers to further improvements. This included studies on financing elementary education, teacher absenteeism, instructional time and quality in primary education, and the impact of information sharing with village education committees. It also included studies on inclusive education for children with disabilities, comparisons between public and private schooling in UP, AP, and MP, and incentives to improve quality.
- **Secondary Education:** The World Bank is supporting the Government of India's centrally sponsored scheme for secondary education, [Rashtriya Madhyamik Shiksha Abhiyan](#) (RMSA), with an estimated \$ 500 million. This is largely based on the analytical work on secondary education, published in 2009, which focused on strategies to improve access, equity, management and quality. In addition, the World Bank has conducted research into the feasibility



for expanded public private partnerships at the secondary level, and has supported learning workshops on the role of information and communication technologies at the secondary level.

- **Support to States:** The World Bank is also supporting state governments. For example, in Bihar, the Bank is providing about \$250m to develop a comprehensive and effective teacher development and management system to improve the quality of education in elementary schools. It is using innovative approaches, such as technology-driven and distance learning models so teachers can continue to be their students even while upgrading their skills and knowledge [2].

## Conclusions

To sum up, the need is to recognize that the knowledge, skills and productivity of growing young and dynamic work force forms the backbone of

economy. To reap the benefits of such young work force, reforms are needed in the education system and also bring forth new factors of production, namely knowledge, skills and technology which have the ability to unleash the productive frontiers of the economy in the most efficient and dynamic way. The government of India is aware of the plight of higher education sector and has been trying to bring reforms, however, 15 bills still awaiting discussion and approval in the parliament. One of the most talked bill is Foreign University Bill, which is supposed to facilitate entry of foreign universities to established campuses in India.

The bill is still under discussion and even if it gets passed, its feasibility and effectiveness is questionable as it misses the context, the diversity and segment of International foreign institutions interested in India. One of the approaches to make internationalization of Indian higher education effective is to develop a coherent and comprehensive policy which aims at infusing excellent, bringing institutional diversity and aids in capacity building.

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## Requirements for articles

- Articles are accepted in English and French. Good English and French spelling and punctuation are preferred. Papers should be written in a third person, impersonal style and any use of 'I/we' should be avoided.
- Articles should not normally exceed 10,000 words. All articles are refereed by acknowledged experts in the subject.
- Abstracts of approximately 100 words are required for all articles (abstract in English and French is required for articles written in French).
- Article should include no more than 7 keywords.
- Articles should be compiled in the following order: title page; abstract; keywords; main text; acknowledgments; appendixes; references.
- The introduction should clearly define the nature of the problem being considered. The new contribution the paper makes should be identified and situated in relation to the relevant scientific literature and, wherever possible, the practical relevance of its results should be indicated. The "Regional Innovations" journal will publish papers that evaluate important topics relevant to new areas of emerging research and policy.
- All the authors of an article should include their full names, affiliations, postal addresses, telephone numbers and email addresses on the cover page of the article. One author should be identified as the corresponding author.
- For all articles non-discriminatory language is mandatory.
- Tables should be prepared on separate sheets; they should not be embedded within the text. Each table should have an appropriate caption.
- All photographs, maps, charts and diagrams should be referred to as "Figures", and should be numbered consecutively in the order in which they are referred to in the text. They should be prepared on separate sheets.
- Endnotes should be marked clearly in the text at a point of punctuation, and listed consecutively at the end of the paper. They should not be listed at the bottom of each relevant page.
- The full references should be listed at the end of the paper. They must include the names and initials of all the authors, the year of publication in parentheses, the full title of the article (or book), the full name of the journal, the volume number and pages and, for books, the publisher's name and city of publication. The references in the text should be done in square brackets (for example, [2; 4; 15]).

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## Call for papers

### INTERNATIONAL CONFERENCE (distance format)

#### “Investment Policies: New Models, New Mindsets, New Markets, New Practical Strategies”

15-16 November 2017

**The aim of the conference** is to involve a wide range of experts in discussing important trends and challenges of investment policies nowadays. Organizations around the world are contemplating alternative approaches to international investment. The focus of the conference will be how to attract the right kind of international investment that can help enhance skills and education, transfer competencies and strengthen manpower as well as build infrastructure, innovation systems and contribute effectively to the competitiveness of the host nation.

**Conference participants:** managers, analysts, experts, business, scientists, PhD students are invited to take part in the conference.

#### **Main conference topics for discussion:**

- International investment and competitiveness;
- The role of international investment in building various types of infrastructure: technological, scientific, health, environment and education, key components for increased competitiveness;
- Innovations, knowledge transfer and education in investment policies;
- Foreign direct investment (FDI) in growing markets;
- The role of governments (and other stakeholders) in shaping a competitive business environment to attract investment, facilitate entrepreneurship and innovation;
- Impact of the global and national crisis on the implementation of investment strategies;
- Networking in investment strategies;
- Investment risk management;
- Fund flows in the investment process;
- Ongoing shifts in client demand, market environments, and industry dynamics;
- Financial sector reforms and better allocation of capital;
- World’s economic opportunities and diversification potential.

The topics of the Conference will discuss how to attract the right kind of international investment that contribute to the competitiveness of national economies. It will shed light on the special role of foreign firms in enhancing a country’s competitiveness which in turn help them attract more investment.

**Conference publication:** the conference materials will be collected and published in a special volume of the Regional Innovations Journal.

**The conference is organized by the InterRegioNovation Association and supported by** the International Business Institute (Paris, France), the International Forum of the Territories (France), FRANCeXP Association (France), Association “Baltic InterRegional Development hub” (Latvia), Department of Economic Cybernetics, Taras Shevchenko National University of Kyiv (Ukraine), Eastern-European Institute for Cross-Border Studies (Kharkiv, Ukraine).

#### **The conference fee is 20 euro.**

Please submit the application with your thesis (2500 words maximum) before **November 06, 2017** to the Conference Committee at [info@irn.center](mailto:info@irn.center)

Application form should include the names of authors, position, institution, post address, phone, e-mail.

The conference language is English but theses will be accepted in English and French.

The Organizing Committee is entitled to selecting papers to be presented at the conference.





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