Journal of Poverty, Investment and Development www.iiste.org
ISSN 2422-846X An International Peer-reviewed Journal
Vol.13, 2015

Factor Mobility Nexus Regional Competition: Switzerland in Focus

Alene Agegnehu[1], Ayele Behaylu[2], Fentay Setargie[3] and Worku Dibu[1]
1, Department of Civic and Ethical Studies, Adigrat University, Ethiopia
2, Department of Geography and Environmental Science, Adigrat University, Ethiopia
3, Department of Economics, Adigrat University, Ethiopia Po .Box 50

Abstract
Regions or countries inter in to competition between or among themselves having an aspiration of improving their jurisdiction through attracting potential firms and labors towards their country by means of reducing tax burdens imposed upon firms and overlooking environmental and other related issues. The aims this paper is to explore the essential elements that are responsible for inter-regional growth disparities and brought an intense competition between or among regions of a nation. And attempts are also done to address the question like: why factors of productions move from one place to another; and what effect does it brings for the development of inter-regional inequalities. Besides, the theoretical and conceptual explanation of factor mobility and the underlying reason responsible for the mobility of factors of productions across and within a country, the practice of factor mobility and inter-cantonal competition with particular emphasis of Switzerland confederation which is the oldest federation with extended autonomous of sub-national unities), and measures being taken by the confederal government to redress the 'race to bottom effect- unproductive and imperfect tax competition' among cantons are also discussed in detail.
Keywords: Factor mobility, revenue equalization, cost equalization, regional competition, tax harmonization

Introduction

Factor mobility as a concept refers to the ability to move factors of production such as labor, capital, out of one production process into another. Factor Mobility can also be defined as the movement of factors of production like natural resources, labor, raw materials, technology, and capitals from their original place to be put to a productive use in other locations. The degree of factor mobility, however, varies widely among countries; pressures exist for the most abundant factors to move to countries with greater scarcity, where they can command a better return on investment (Timothy, 2007).

Harris and Todaro (1970) model of factor mobility has intended to explain the interregional mobility of factors, that are labor and capital. This model assumes that the migration decision is based on factor the differentials between the expected wage in the urban sector and the wage rate in the rural sector. among other, factors, such as price differentiations between regions is an inherent reason that leads inter regional flow of labor and capitals. When there is a significant variation of labor availability among countries, abundant labor move towards countries with greater scarcity, to get a better return. As a result, in countries where labor is abundant compared to capital, laborers suffer from unemployed or low wages. As a result, many of those abundant workers will move to nations that pay higher wages and enjoy full employment status or at least high employment rates (Suranovic**,** 2010).

Likewise, capital movement at international level is done in the similar way, i.e. it moves from nations with abundant capital towards a country with scarce endowment. As Timothy (2007) explained, the movement of labor and capital between the United States and Mexico is good case in point. Mexico gets capital from the United States; and the United State gets workers from Mexico. If the movement of goods and factors of production i.e. capital, labor, technology and raw materials are permitted around the globe then the comparative cost of transferring these goods and factors would be the sole determinant of the location of production.

In addition to international mobility, domestic factor mobility can also be understood as the movement of or reallocation of productive factors across sectors within the domestic economy. Different degrees of mobility arise because there are different costs associated with moving factors between industries. In general, factors of production are potentially mobile in three distinct ways: Between firms within the same industry, between industries within the same country, between firms or industries across countries (Timothy, 2007).

The movement of these factors or the degree of factor mobility across the regions can be determined by various multifold variables. Besides low tax rate, other important factors such as market access, infrastructure, national stock of know-how, experience and technology generate externalities are important elements that determine the preference of firms and workers regarding where to locate and make their capital more profitable (Asa and Karin, 2004).

Categories of factors of production

Michael (2002) in his article attempted to identify various categories of factors of production with its unique features. These are:

1. Capital- companies and private individuals in the first events transfer capital because of differences in expected returns. They find information on interest rate differences readily available, and they can transfer capital immediately at a low cost. Each local government knows that when the regions are sufficiently opened, the increase in the provision of local public goods such as low cost of transport, calls a larger amount of capital into the home region; that capital inflow improves the regional welfare. Therefore, local governments compete for capital inflow and local public goods will be over-provided. When the regions are closed to a sufficient degree, however, capital moves to a region with a larger market. Consequently, each local government hesitates to impose taxes for the maintenance of a larger disposable income (Wilson, 1999).

2. People or labor- People are also part of factors of production that it is internationally and domestically mobile. Comparatively speaking, the scope of the movement of People is less than that of capital. People move from one country to another not just only for economic purpose but also for several other reasons:

Tourism and education purpose: People moves abroad for recreation and educational purpose. These kinds of movement with such purpose, however do not affect factors endowment of the host state because they do not work in it. While people who move to another nation for the major reason of work, do largely affect factor endowment of the host country. Unlike capital that is transferred between countries at a low cost, people usually incur high cost to work in another country. Among others, they need to have immigration paper which is very scarcely given to their citizens by most states of the world, and face troublesome challenges such as learning new language, adjusting to new culture and environment in the receiving state (Timothy, 2007).

Economic purposes: People, no matter how their professional background is, mostly work in another country for economic reasons. For instance, they move in search of better job with better salary; social security, to keep their business from heavy tax burden so that they attain more profit. In so doing, individuals compare the low-cost value of expected utility from his home region to that in a host state. They decide to move around if the anticipated utility of moving is higher than the expected utility of staying at home. The impetus to get a higher income and better working environment therefore matter a lot. Consequently, the movement rates from countries with less developed financial markets into countries with more developed financial markets should be higher (Bonin and Eichhorst, 2008:77).

Political reasons: People also move for political reasons. For instance, if there are harassment or threat of war and other social insecurity, they are commonly becomes refugees and usually become part of the labor pool in their new host lands.

3. Technology and Raw Material: Technology and raw materials are also crucial factor in the production process. While technology is a medium or mechanism of production, raw materials are vital inputs in the production process. Consequently, technology and raw materials move across borders due to scarcity. While some regions are rich enough in raw materials and technology, whereas, others countries suffer from severe shortages in either of them. Accordingly, an increased relocation of production from the technology rich countries towards low labor cost countries, or increase the demand of developing region’s markets for technology in terms of knowhow (Timothy, 2007).

Theories or / models of factor mobility

Mobility (Ricardian) model- according to this model, factors of production are homogenous and, moves freely and costless between firm within an industry and between industries within a country, but are immobile between countries. It is also assumed that each worker has the same productivity as every other worker in every other industry. In other words, according to, Ricardian and Heckscher-Ohlins’ models, given that factors are assumed to be homogeneous, once move to a completely different industry, they immediately become just as productive as the factors that had originally been employed in that industry (Suranovic,2010). For example, a beer worker who moved to the wine industry would immediately become as productive as a longtime wine worker. This assumption is possible only in a long-run scenario. In other words, given enough time, all factors can be moved and become productive in other industries. Although, there would be some transition costs incurred, such as the cost of location (market) search, transportation and other transactions, but it still remains reasonable to assume that the transfer of factors is costless (Timothy, 2007).

Immobile Factor Model- the immobile factor model highlights the effects of factor mobility between industries within a country when a country moves to free trade. Unlike the Ricardian model which emphasis, labor can move between industries costlessly; the immobile factor model, assume that the cost of moving a factor is prohibitive or a restrictive of free movement. Nothing like Ricardian mobile model, the immobile model will happen within an extreme short-run scenario. In the very short run, it is too tricky for any factor to be moved and become productive in another industry (Suranovic, 2010).

To sum up, both mobility model of Richard and immobility theory/model/ focused in a two country, two-good, two-factors, perfectly competitive general equilibrium model but the immobility model stress the fact that labor cannot move across industries.

Factor mobility based on comparative advantages

Factor mobility has important role for international trade and investment flows between countries and regions. In free and open economy models, the assumption of factor immobility across trading partners is at the basis of the concept of comparative advantage lying on differences in factor endowments. In country, with two factors of production (capital and labor), countries will tend to export goods that are intensive in the domestic abundant factor and import goods that are intensive in the other one. Hence, trade is not just a way to exchange goods, but is essentially a way to access the scarce factor which incorporated in imported goods. The labor abundant country would likely to be a net exporter of workers and a net importer of capital (Stephen, 2012).

Factor mobility based on agglomeration economies

New trade theories and New Economic Geography emphasizes that, under certain circumstances (low overcrowding costs and trade barriers), technological factors or financial externalities may create agglomeration effects, attracting both capital and labor flows. In terms of labor, both skilled and unskilled labors have an effect on factor mobility. For example, the presence of a large skilled migrant community may lead that region a place of international schools, making a location attractive for foreign firms and their foreign managers. If there are excess unskilled workers within a region, then labors intensive producers from other countries might decide to transfer their activities towards that region, because they can benefit from a relatively cheap unskilled workforce. In addition, a given location with the presence of high technology also attracts foreign companies and engineers (Giorgio, 2007:5-6; Stephen, 2012).

In a most general sense, the agglomeration or centripetal forces, as Redding and Anthony (2004) note, are usually classified in three groups. The first are knowledge or technological spillovers, that make it attractive for firms to locate close to each other. The second are various labor market pooling effects, which encourage firms to locate where they can benefit from readily available labor skills by attracting skilled labor away from existing firms. The third centripetal force arises from linkages between buyers and sellers. It is inherently true, that all business men want to locate their firms by calculating where their customers are, and customers will also want to locate their residence close to their suppliers. These linkages are simply the demand and supply linkages. They create a positive interdependence between the location decisions of different firms and customers-which intern give rise to a process of cumulative causation, creating agglomerations of activity (Anthony, 1999). These centripetal or agglomeration forces can function at quite an aggregate level, drawing firms from all sectors into locations with large markets, with basic industrial labor skills, or access to business services such as transportation, finance and telecommunications. This is because of the fact that, an increase in the concentration of industries and infrastructure in one region will decrease the cost of innovation and attract more business owners in the sector. It would also affect the structure of residents' wages through changes in regional productivity (Gianmarco and Jacques-Francois, 2000).

In contrast to agglomeration forces which attract firms, there is also force that attracts firms in the opposite direction- centrifugal forces, encouraging the dispersion of activity. These include congestion (overcrowded), pollution, competition for immobile factors and other externalities that might be associated with concentrations of economic activity are factors that might be deter agglomeration. For example, if the price of land and labor is raise up in centers of activity and if there is demand from consumers who are located outside the centers of activity; dispersed or separate consumers will encourage dispersion (scattering) of firms or producers, particularly if trade barriers or transport costs are high (Anthony, 1999).

Inter-regional competition- under no capital mobility, each country employs its own endowment of capital and taxes are set optimally in that the marginal utilities of private and public spending are equal. It is what scholars of economics called *tax competition equilibrium*. This will automatically changes when capital becomes mobile. The term tax competition describes how the countries compete for the fixed international amount of capital by undercutting each other's tax rates, effectively engaging in a race to the bottom in tax rates. Each country sets its tax rate assuming that tax rates in all other countries remain unchanged, but once up on a time if a tax rate is lowered in one region, the other countries will lose capital to that country and will have an incentive to decrease their tax rate as well (Krogstrup, 2002:6; John Douglas, 1999).

Inter-regional competition in the area of tax, according to Davidson (2007) is seen as government's economic policy strategy having low tax rate to attract capital and business activities in order to improve their economic welfare in terms of employment and output growth within its jurisdiction. In doing so regions reduces tax revenues and hence puts a pressure on the general government sector to increase efficiency in public spending (Rossi *et al,* 2004). Likewise, as Tiebout (1956), give details in his book theory of local public good provision, also provides a theory of efficient tax competition. Capitals and labors will move across a region, what Tiebout call it '*vote by foot*' by assuming that there are better economic returns. He assumed that each region's government is controlled by its landowners, who seek to maximize the after-tax value of the region's land by attracting individuals to reside on this land. To do so, the government offers public goods that are financed by local taxes. In general, the Tiebout's, (1956) hypothesis is based on seven assumptions:

1) The consumer-voters are fully mobile and no constraints exist in their mobility and selection of optimal communities
2) Consumer-voters have complete knowledge on revenue and expenditure patterns that different communities offer and are aware of how to react to such differences between communities.
3) A relatively large number of alternative communities with different offering of public goods are available for the consumer-voters to choose from.
4) No restrictions for employment opportunities at different places thus individuals may earn the same revenue no matter where they live.
5) The supply of public goods in a specific jurisdiction does not spillover effect (external costs and benefits) to another jurisdiction.
6) There is an optimal (best) community size for which the bundle of public services can be produced at the lowest average cost possible.
7) Communities are constantly in pursuit of that optimal (best) size.

Tax competition however has opposite extreme ends that an independent government engages in wasteful competition for scarce capital through reductions in tax rates and public expenditure levels. The effects of competitions on regional welfare of providing local public goods are categorized into two. *First*, local public goods improve the productivity of manufacturing firms in the home region. Thereby, the firms can take markets from the other region's firms in competition. Consequently, the reward to capital will increase. Each regional government therefore has an incentive to provide more local public goods than the other government does, so that the competition between the two governments leads them to over-provide local public goods. *Secondly*, productivity improvement increases the number of varieties; then it decreases the price index. The decline of the price index has an interregional spillover effect. Manufactured goods are consumed not only in the home region, but also in the other region. For that reason, the increase in the number of varieties decreases the other region's price index as well as that of the home region. That is, the effects of local public goods spill over into the other region through the trade of manufactured goods. The spillover effect increases associated with increased interregional openness (Ihara, 2008).

Classification or areas of competition- regarding on which area the regional government computes, how to and for what purpose they compete; inter-regional competition, on particular emphasis given for fiscal competition, according to (Roberto, 1989), can possibly be classified in to *three* areas categories:

Competition in the provision of public goods- sub-national units compete each other in the provision of a bundle of public goods and services, such as to improve their quality, reduce their cost and adjust supply to match residents' preferences. This kind of competition is aiming to increase efficiency in public goods and services.

Competition for funds- is competition of regions in search of funds to finance the provision of public goods to its inhabitants at the lowest possible tax price. In doing so, it requires to enlarge tax bases or revenues, and disputes for usually scarce costless or low-cost funds, provided by a federal government. If personal income tax is allocate to regional governments, they may attract the wealthy from other jurisdictions by reducing tax rates or by providing a package of public goods tailored to their taste

Competition for business investment: this kind of competition has the aims to increase production, employment levels and income within the unit. Instruments of this type of competition are lowering corporate income tax, tax incentives and provide public services to a particular firm.

Merits and Demerits of inter-regional competitions

Inter-regional competitions not merely in the areas of tax but also in other related areas has both advantages and disadvantages on the efficiency provision of public service, generating revenues and attracting capitals to a particular region.

Advantages

According to Tiebout 1956; Rossi *et al*, 2004), if it appears in a small scale, inter regional competition have the many advantages. It improves the quality, quantity and access of local public services in which it serves as a main source of provision of social service improvement. In addition, inter regional competition particularly on tax competition can ensures greater diversity, choice, and efficiency of services by having high quality of infrastructure. It also allows the populace to evaluate and compare their local government's performance in relation with the neighboring regions; thus it enhances the quality of political decision-making and reinforces accountability. It promotes policy innovation and experimentations so that they adopt and implement better practiced policy. Finally, tax competition and reduction of the tax burden attract or retain firms within its jurisdiction as a result it gives employment opportunities and improve their economy (Roberto, 1989; Tiebout 1956; Rossi *et al*, 2004).

Disadvantages

Unrestrained horizontal competition brought a number of unpleasant consequences for a national economy. Some of the problems related with it are: Weaken internal common market- though having national common market is an important issue, sub-national governments in pursuit of attracting capitals and labor may spoil in beggar-thy neighboring policy and in the process may intentionally or un intentionally erect barriers on mobility's of goods and services. It degrade of the quality of life- for the need of attracting capital and labor, local governments offer an ever expanding range of tax allowance and lowering of environmental and regulatory standards which brought horrible public life. It reduced social welfare and creates fiscal injustice- to attract business men, regions grant special tax bonus and tax holydays, to a firm. To compensate loss of revenue, it is a must for the region to impose high tax burden for other firms or individuals. Government will unable to collect adequate revenues. Lowering tax rate therefore put the sustainability of public spending and realization of the planned projects under question. It also poses worst effect on less developed and financially weak states which they are powerless to provide social services and public works so as to attract new potential firms. In the long run, it can lead to 'race to the bottom' effects (Tiebout 1956; Rossi *et al*, 2004).

Part-Two- Case studies

The Empirical Assessment of Factor Mobility and Inter-Regional Competitions in Switzerland

An overview of about Switzerland

Switzerland is one of the mountainous, richest and smallest federation located in the central Europe and is bordered by France to the west and northwest, Germany to the north, Austria and to the east and Italy to the south. Swiss have a populations of just not more than 7.5 millions, covering an area of 41 287 km^2 with the capital city of Berne. Switzerland recognized four official languages: Germans accounts 65% of the population, the French 18%, the Italians for 10% and the Romansch accounts 1%. Regarding religious denomination, more than 48% of the populations have a faith of Roman Catholic and 44% Protestant (European Observatory on Health Care Systems, 2000).

Switzerland, officially known as the Swiss Confederation, is a federal parliamentary republic with three levels of government, the confederation- at the national level, cantons (26) with its own tax system besides to the central- at the intermediate level, and Communes (2880) at local level where the degree of autonomy granted to them is determined by the individual Cantons and therefore varies considerably from one Canton to the other. Of the 26 Cantons, 20s are considered as full cantons and the rest are six Half-cantons. People usually make no any distinction between full and half-cantons but consider that there are 26 Cantons in sum. Each Canton has its own parliament, government and courts. The Confederation has authority in all areas in which it is empowered by the Federal Constitution, such as foreign and security policies, customs duties and a nation -wide legislation. Tasks which do not expressly fall within the domain of the Confederation are matters for the Cantons. The federal executive authority is called the ***Federal Council***- consists of a seven member cabinets elected by the federal parliament for a four-year term (Dafflon, 2004).

The President of the Confederation is one of the members of the Federal Council elected for just one year with the duty merely to chairs the sessions of the Federal Council and undertakes special ceremonial duties but has no extra additional power. The federal legislative authority is called the *Federal Assembly*- consists of two chambers namely *National Council*- with 200 members at national level, and the *Council of States*- with 46 representatives of the Cantons elected two representatives from each full canton and one for each half canton directly elected by the people. Its political philosophy could be described as Direct Democracy with frequent referendums on national, cantonal and communal levels. The participation of people in direct democracy is dully recognized in most cantonal constitutions for the Communes so that citizens themselves may take an active part in the decision making on all important political and economic issues **(Dafflon, 2004).**

Inter-cantonal competition under Switzerland federation

Every canton in Switzerland has adequate fiscal autonomy to enter in to tax competition. For a matter of fact, the small size of Switzerland and of its cantons permits a high degree of factor mobility, thereby exacerbating the competition. Private and corporate taxpayers can easily move from place to place with low tax burdens. Because of the prevalence of well-developed transport infrastructure, which encourages labor mobility and go back and forth, has probably increased competitive pressure. In Switzerland, factor mobility much stronger on the municipal level than on the cantonal level because transaction costs are lower between nearby jurisdictions (Feld and Kirchgässner, 2001).

Since the Swiss federal government derives its legitimacy from the 26 cantons, as a result, the central government only plays a subsidiary role, carrying out limited competencies that account for less than one-third of total taxes and spending(Pierre B,-86).

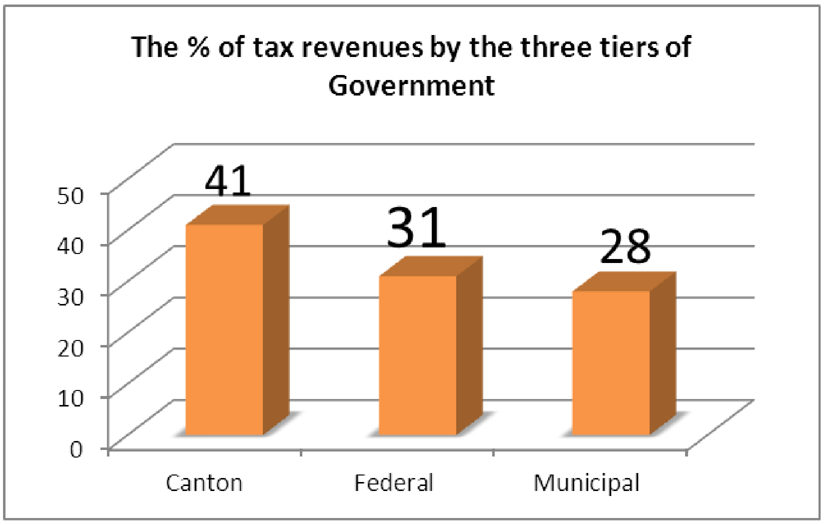

Fig.1. the % of tax revenues by the three tiers of Government
***Source**: f Pierre Bessard (2006)*

The cantons are empowered to levy on any kind of tax provided that it is not within the exclusive authority of the Confederation. The Municipalities however are entitled to levy taxes only to the extent authorized by the cantons based on cantonal law. But in some cantons the municipalities have their own tax legislations (Swiss Federal Tax Administration Team Documentation and Fiscal Information, 2013).

The Swiss federal system emphasizes the sovereignty of the Cantons, at the intermediate level, and the communes, at the local and lower level which is derived from the federal and cantonal constitutions, which lists not only the tasks of each government level, but also fix their right to levy some sorts of taxes. Cantonal tax autonomy is a principle of Swiss federalism and protected by the Constitution. It is extensive and involves the power of the cantons to define the type of tax that is levied, as well as the rates (Fabrizio Gilardiy *et al*, 2010).

Thus, the assignment of competencies and revenue sources are defined at each level of government. Each canton, therefore, has their own fiscal systems- able to set its own tax rates, and they decide on the provision of public goods and services on their own jurisdiction, independent of the federal government (Dafflon, 2003).

Tax competition between regional or local authorities within a decentralized, multilevel government system has been an issue for policy makers. This is because of the fact that, the tax burden, besides other factors, is just one factor that plays a determinant role for the location decision of private firms. Such kind of fact is commonly visible in Switzerland, where the differences in business taxation between and or within cantons have been important **(**Rossi *et al***,** 2004**)**. The tax burden imposed on the firms' profit varied considerably between the 26 Swiss cantons. According to OECD Economic Survey evidences indicates that in Switzerland the average tax rate on business profits varies from 13 to 31 per cent when the three-level government taxation is considered altogether (OECD, 1999).

Such a big discrepancy on business taxation between sub national governments provides a framework where tax competition through reduction of the tax burden should attract or retain firms within the jurisdiction implementing this policy. Because of this autonomy of each canton which appears ready to discuss a fiscal agreement with the newly established firms producing a relatively high-valued output, in the long run any economic benefit that might result in terms of regional income or employment growth is bound to be nullified by the fiscal competition of other cantons. Whenever a canton's fiscal strategy is successful in attracting a firm by granting it a fiscal bonus, another canton will immediately do the same thing by reducing its tax burden on business profit and capital, until all cantonal fiscal burdens are eventually reduced to a minimum owing to a lack of co-ordination between local governments. This kind self-reinforcing, downhill process largely affects Switzerland's national budget and the quality of public services. The table below which is taken from Dafflon, 2003 shows a brief summary about how cantons get in to tax competition in search attracting of capital and labor in to its jurisdiction and to make their economy boom up. He took only seven French-speaking cantons as a case study to reveal practical evidence as to how each canton get in to competition by down cutting their tax rate and bases.

Table-1. Cantonal competition by tax reduction.

Name of cantons	1985	1995	1999	1985-1999
Berne	**72 028**	**51 710 ↓**	**51 681 ↓**	**– 28%**
Fribourg	**61 614**	**59 149 ↓**	**58 721 ↓**	**– 5%**
Geneva	**59 641**	**59 607 ↓**	**63 342 ↑**	**+6%**
Jura	**85 582**	**58 723 ↓**	**58 549 ↓**	**– 32%**
Neuchatel	**90 180**	**88 897 ↓**	**88 565 ↓**	**– 2%**
Valais	**74 704**	**65 325 ↓**	**65 204 ↓**	**– 13%**
Vaud	**66 914**	**64 091 ↓**	**63 976 ↓**	**– 4%**

Source: Dafflon (2003).

The table shows that all cantons named above, except Geneva, have reduced their tax burden on business profits over the years. The rationale behind canton Jura has the highest rate of decrease (32 per cent), owing to its discomfited geographic position and its relatively low cantonal income. The canton Jura and Valais suffers more from their geographical situation and thus tries to compensate it and attract or retain firms by an important decrease in business taxation over the period specified. Tax holiday or reduction of business tax is however not the a solid factor attracting firms but rather a number of other factors such as the proximity of markets, and easy or low-cost access to motorway and railway networks are so important.

On the other hand, the canton of Berne have considerably reduced its tax burden on firms in order to keep up with, compete or to catch up, with the rich canton called –Zurich area. It is plausible to say that the remaining cantons had also lowered their business taxation for similar reasons. The canton Zurich on the other hand, known by its prosperity in economy has a number of firms and industries than others. Such agglomeration effects enable Zurich to have incomparable advantages to attract potential capitals and firms simply without having any reduction in tax base.

What measures being taken by the federal government to address such unwelcome competition and cantonal disparity?

Switzerland is characterized by significant different not only in population number and distribution, language, religion and geographic size; but also varies in their national income, level of development, public finance and tax burden among cantons. These factors of difference in combination give rise to varying levels of public service by each canton. Taking these disparities among cantons in to considerations, the confederal government necessitates to take the following measures with the aims of providing at least a minimum standard of public services (Dafflon, 2004).

A. The fiscal equalization- refers to the transfer of fiscal resources across cantons to balance differences in revenue raising capacity or public service cost. It has aimed at fostering inter- harmonization regional equity. Equalization can also be seen as increasing efficiency since it prevents households from moving towards high-income canton, simply for receiving public services at lower tax rates (OECD, 2011).

The financial autonomy and independent of cantons is one of the founding and inherent principles of Swiss federalism (Fabrizio, 2010). From the very beginning, there have been differences between rich and poor; large and small cantons; and in 1938, the first equalization policy was introduced in the form of conditional grants, based on the tax capacity of the cantons. Later on in 1958, the Swiss constitution empowers the federal government to equalize disparities among cantons. Its objective was to correct fiscal imbalance and enabling all cantons be able to provide at least some minimum acceptable levels of service without much heavier tax burdens in some cantons than in others (Ibid).

There are three possible mechanisms of federal equalization programs being employed to do it:

1) Conditional specific federal grants-in-aid to the Canton- Many items of cantonal expenditures assisted by federal specific grants; which accounts about one third of federal grants devoted for this purpose. It is mainly vertical, from federal to lower levels of government which regulated by many special laws concerning the provision of public services at decentralized levels (Dafflon, 2004).

2), Revenue sharing from federal tax revenues and National Bank- the Cantons' share in federal tax revenues derives from several sources, such as the federal direct tax (FDT), the withholding tax (WT) and part of the customs duties on petrol and motor fuel (DC). In addition, the Cantons also received from the National Bank a share of its yearly benefit (Ibid).

3). Cantonal contributions to social security: it includes the contributions of cantons to three federal social security programs: the old-age and survivors insurance (OSI), the disabled pension scheme (DPs) and the family allowances in agriculture (AFA). The percentage contributions of each level of government are summarized as follow in the table:

Program	Federal shares	Cantonal shares
Old-age and survivors insurance (OSI)	**17%**	**3%**
Disabled pension scheme (DPS)	**37.s%**	**12.5%**
Family allowances in agriculture(FAA)	2/3	1/3

Source: *Dafflon (2004)*

B. Tax harmonization(material tax harmonization): the possible outcome of difference in cantonal tax systems is not only treating taxpayers unequal across cantons but also leads to highly complex legal disposition on the basis of which cantons collect their taxes. That means cantons, not only differ on the types of taxes, tax rates, and tax allowances they had, but also the legal procedures they follow for determining tax liability and calculating taxes due, and definitions of tax fraud and the extent of penal sanctions (Fabrizio, 2010). Such varied and complex tax system was highly criticized and call for constitutional provision to have tax harmonization among cantons. In doing so, according to Fabrizio, 2010, the 1999 Swiss federal constitution under article 129, empower the federal government to do the following tasks*:*

> *To set out principles on the harmonization of the direct taxes imposed by all levels government; To harmonize tax liability, the object of the tax and the tax period, procedural law and the law relating to tax offences; and The federal government shall issued regulations to prevent unjustified tax benefits.*

These principles however remain on paper until the end of 2000- which is a period where formal tax harmonization among regions was achieved because of lack of political support (Ibid). All measures mentioned above tells us how the Swiss government react with and to deter undesirable inter-regional tax competition and efforts made by the federal government to brought fiscal equalization in order to each canton to got at least a minimum of acceptable standards of social services.

C. **Revenue equalization-** it includes horizontal and vertical transfers of revenue and is based on the resources indicator. Cantons which meet an indicator of financial capacity of national mean (standards) and or have more than standards will have to finance horizontal equalization. Unlike horizontal equalization-which financed by cantons themselves, vertical equalization will be financed by the Confederation. Cantons with an indicator lower than the standard (100) will receive equalization payments. Based on the formula adopted there that takes financial resources of the Cantons as a corner stone, the poorer a Canton, the bigger will be the amount per capita that it will get (Dafflon, 2004).

D. Cost equalization- cost equalization policy of Switzerland is consists of two elements:

i. **Compensation for additional costs: geography and topography**- this is a compensation for additional costs in the production of cantonal public services for geographical and topographical reasons, primarily in peripheral and mountainous regions which is more affected by altitude, low population density, too much distant for service delivery. The main purpose compensation is to control water, forest, the protection of main roads against natural danger. A canton that incurs costs higher than national average would receive compensation the form of conditional block grants- remains linked to the accomplishment of the specific task. The Criteria for additional costs: geography and topography are: population density, population above 800m altitude, population in a commune with less than 200 inhabitants and area above 1080 m. altitude (Dafflon, 2004). It is oriented towards in favor of the mountainous areas or cantons.

ii.. Compensation for additional charges: socio-demographic factors: it is on the other hand, formulate to deal with specific problems in urban areas. The eligible criteria that need to take in to consideration are: population aged 64 and below receiving social aid; population above 65 of age; foreign residents, weighted; and unemployed people. More over level of poverty, Mono-parental family with one or more children aged below 20 and degree of drug problem (drug addict therapy) are also take in to considerations. It is for the most part oriented in favor of the urban areas (Ibid).

Is there inter-cantonal cooperation?

Besides intense competition among cantons, there is also an area where cantons obliged to cooperate in an issue that is in common. If a Cantonal task which will have spillover effects on other cantons, it must be performed in contractual co-operation. In doing so, the Confederation could oblige any reluctant Canton, which did not give its consent to participate to a co-operation task, when at least half of the co-operating Cantons ask for such an intervention. Canton which, therefore, benefit from services provided by another will have a duty to pay compensation to the providing canon (Dafflon, 2003). Some of the being tasks done in contractual cooperation are: institutions for disable, penitentiary, urban public transportation, sewage purification plants, waste disposal plants, universities, professional high schools, specific Medicare and specialized hospitals, cultural institutions of inter-cantonal importance (Ibid).

If all cantons could credibly commit to increasing the tax rate marginally from the tax competition equilibrium level, such that the national allocation of capital would remain unchanged, overall utility in all cantons would be increase. Such a coordinated increase in the tax rate would lead to shift resources from private spending to public spending, which brings equates the marginal utility of private spending with that of public spending-perhaps exceed from the former one (Krogstrup, 2002).

Conclusion

Factor mobility like capital by now move from across region as freely and perhaps costless as compare with labor which the later is more restricted by factors such as high cost, quest for immigration visa or passport. Labor or a person moves in to neighboring regions for the reason that they calculate their cost-benefit returns by comparing the empirical variation among countries in terms of their GDP, better wage and income, and by comparing the personal income tax of the host regions with the sending one. Moreover, political factors for example, lack of political freedom, persecutions and massive summary execution of people by the regime etc play significant role for the out flow of peoples from once home region.

Switzerland recognized extended sovereignty to each cantonal unit. Decentralization especially direct taxes, and subsidization are the Swiss government policy choices which are also extend to the case of taxation. Though all cantons engaged in competition and try to attract wealthy firms by having dissimilar tax rates and tax systems, the competition has not as such led to a nationwide race to the bottom. This is partly taxpayers explained by the presence of inter-cantonal cooperative arrangements, like the system of fiscal equalization and tax harmonization and by the institution of direct democracy that enable individuals and companies to decide their tax rates and base. However the race to the bottom effect is relatively high for the reason that of intense income tax competition among cantons especially for low and middle income groups - more subjective to difference tax rates and bases. The issues of and acceptability or not of differentiate in income tax is a political agenda in Swiss federation.

The Swiss federal government does take what it believed best in redressing the actual interregional competition. Of these measures, fiscal equalization, and tax harmonization, cost harmonization are some of the policy option being practiced by now. Besides competition exist there, there is also a sense of cooperation in an issues which is in common such as institutions that are targeted with disable people, university, urban transportation and sewerage etc. moreover, they also obliged most of the time by federal government, to cooperate and offer appropriate amount of compensation to the service used provided by other canton (spillover effect), and an activities which has had a spillover effect over other jurisdictions.

References

Anthony J. Venables (1999*) Regional Integration Agreements: a force for convergence or divergence**?*** Paper prepared for the Annual Bank Conference on Development Economics in Paris in June 1999.

Bonin Holger and Eichhorst Werner (2008) Geographic Mobility in the European Union: Optimizing its Economic and Social Benefits. IZA Research Report No. 19

Dafflon Bernard (2003) Fiscal Federalism In Switzerland: a survey of constitutional issues, budget responsibility and equalization. Working Paper Nr 278. University of Fribourg.

Dafflon Bernard (2004) Federal-Cantonal Equalization in Switzerland: An Overview of the Present System and Reform in Progress. Working paper No 356.

Davidson Sinclair (2007) Tax competition: Much to do about very little.

Gianmarco I.P. Ottavianoa, Jacques-Francois Thisse (2000) Integration,agglomeration and the political economics of factor mobility. Journal of Public Economics 83 (2002) 429–456.

Gilardiy Fabrizio (2010) Cantonal tax autonomy in Switzerland: Trends, challenges, and experiences.

Giorgio Barba Navaretti, Gianfranco De Simone and Alessandro Sembenelli (2007) Migration and Foreign Direct Investment: A review of the literature.

Hansson Asa and Olofsdotter Karin (2004) Integration and Tax Competition: An Empirical Study for OECD Countries. Lund University, Sweden.pp-2.

Ihara Ryusuke.(2008) Transport costs, capital mobility and the provision International Technology, Education and Environment Conference (c) for African Society.

John Douglas Wilson (1999). Theories of Tax Competition. National Tax Journal Vol 52 no. 2 (June 1999) pp. 269-304. Forum on Mobility and Tax Analysis.

Krogstrup Signe (2002) What do Theories of Tax Competition Predict for Capital Taxes in EU Countries? A Review of the Tax Competition Literature.HEI Working Paper No:

Michael J. hiscox, (2002) Commerce, Coalitions, and Factor Mobility: Evidence of local public goods. Available: www.elsevier.com/locate/regec Political Science. Review. Vol. 96, No. 3 September 2002.

Organization For Economic cooperation and Development (OECD) (2011) Tax Competition between Sub-

Central Governments. COM/CTPA/ECO/GOV/WP (2011)13

Redding Stephen J. and Anthony J. Venables (2004) Economic Geography and International Inequality, Journal of International Economics, 62(1), 53-82.

Rossi Sergio and Dafflon Bernard (2004) Tax competition between sub national governments: Scientific Research (ASSR).

Stephen J. Redding (2012) Goods Trade, Factor Mobility And Welfare. National Bureau Of Economic Research. Working Paper 18008. Cambridge, MA 02138.

Suranovic Steve (2010) International Economics: Theory and Policy, v. 1.0 Switzerland.

The European Observatory on Health Care Systems (2000) *Health Care Systems in Transition: theoretical and regional policy issues with reference to Switzerland*. University of Fribourg,Vol. 52 no. 2 (June 1999) pp. 269-304. Michigan State University.

The Swiss Federal Tax Administration Team Documentation and Fiscal Information, 2013.

Tiebout, Charles M. (1956) A Pure Theory of Local Expenditures. The Journal of Political Economy, Vol. 64, No. 5 (Oct., 1956), pp. 416-424. The University of Chicago Press.

Timothy A. Falade, (2007**)** Globalization and Factor Mobility**.** Proceedings of the 1st from Congressional Votes on Trade Legislation. Harvard University. American.

Wilson John Douglas(1999**)** *Theories of Tax Competition. National Tax Journal.*