

Statistical Indicators System regarding Religious Phenomena¹

Abstract:

The approaching ways in religious phenomenon quantitative studies are, most of the times, based only on the evolution of adherent flows and population structure from a religious point of view. In this paper, an integrated statistical indicators system will be designed. The main purpose of the system is to enhance the quality and coherence of the religious phenomenon. The most important indicators from the integrated system are: context indicators (political, economical, socio-cultural, demographical), basic indicators, level and structure indicators, participation indicators, resource indicators (spiritual, human and pecuniary), quality, efficiency and outcomes (religious freedom, social connections, international relationships). Designing a complete, coherent system of indicators is necessary for a correct approach in studying the religious phenomenon. Statistical indicators can supply quantitative data for the operational description of the religious phenomenon. The indicators' system makes possible not only a descriptive analysis but also some advanced statistical techniques (e.g. regression and correlation method).

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Motto:

“Not everything that can be counted counts, and not everything that counts can be counted.”

Albert Einstein

Preamble

Various systems of statistical indicators exist and are unanimously accepted from the system of macroeconomic statistical indicators, financial indicators, and the corresponding educational media indicators. From this viewpoint, designing a system of statistical indicators for the religious area represents a challenge but, at the same time an implementation of statistic system analysis in the field of religious studies.

Why should one come up with statistical indicators about religion? The answers are various and pay attention to:

- a correct and comprehensive operational description
- making possible quantitative analyses
- descriptive statistic methods
- advanced statistical techniques
- studying religion as a system
- making easier comparisons (regional, international, and inter-religious etc.)

Before proceeding to the composition of the indicators system, we must answer the question: “What is a statistical indicator?”. Isaic-Maniu, Pecican, Ștefănescu, Vodă, Wagner (2003)² consider that: „the statistical indicator is an instrument that characterizes – in numbers – the structure, correlations, and time changes of various socio-economic phenomena” while Johnstone (1985)³ believes that “the indicator is operational

description of a state.”

Starting from these definitions, in the construction of the system of statistical indicators, to every indicator, we will associate a card that will include elements such as: definition, the purpose of utilization, the method and the computing bases, the data needed for the computation of the indicator, the data sources, aggregation level, interpretation of the indicator, standards of quality, and the characterization limits of the indicator. The format of the card follows:

Indicator	
Characteristics	
Definition	
Purpose	
Symbol	
Calculus method	
Formula	
Data needed	
Source of data	
Type	
Class/ category	
Aggregation level	
Interpretation	
Quality standards	

For reasons that concern the space, this material will present just the list of indicators, followed by their definition and some short comments.

Regarding the classification of indicators there are many methods through which we can achieve this structure depending on the chosen criteria. The most important criteria and the way in which indicators are structured are:

By data type:

- absolute
- relative;
- average;

By the scale of measurement:

- measured on the nominal scale;
- measured on the ordinal scale;
- measured on the interval scale;
- measured on the “continuous scale.

By the adding way:

- primary
- derived.

By time occurrence:

- of interval
- of moment
- hybrids.

Except for a few indicators (as are for instance those of the contextual subsystem), the overwhelming majority of indicators presented afterwards are unusual.

The system of indicators is composed by various subsystems. We present a possible arrange-

ment of subsystems comprising also the indicators that belong to the respective subsystems:

1. Indicators of context
 - 1.1. Indicators of the politic context
 1. Form of government (GOV)
 2. Legislative regulations of the religious area (LEG)
 3. Connection type between state and church (STCH)
 - 1.2. Indicators of the economic context
 1. Gross Domestic Product - per capita (GDPC)
 2. The amount of financial resources drawn to "religious field" as percentage of GDP (AFRGDP)
3. Unemployment rate (UR)
 - 1.3. Socio-Cultural indicators
 1. Illiteracy Rates (IR)
 2. Structure of population from the viewpoint of ethnic affiliation (ETN)
 - 1.4. Indicators of demographic context
 1. Population (P)
 2. General birth rate (GBR)
 3. General fertility rate (GFR)
 4. General wedding rate (GWR)
 5. General divorce rate (GDR)
2. Primary indicators of classification in the religious system
 1. Number of divine persons (DVN)
 2. Rites for birth (rebirth) (RTBH)
 3. Rite for marriage (RMRG)
 4. Mixed marriages (MXMRG)
 5. Ways to tackle the divorces (WTD)
 6. Rites for death (RTDT)
 7. Woman ordaining (WO)
 8. Active methods to promote "the truth" (AMT)
 9. Passive methods to promote "the truth" (PMT)
 10. Iconography type (ICONT)
3. Indicators of level and structure
 - 1.. Number of existing religious groups (NRG)
 2. Structure of the population from viewpoint of the religious affiliation (RLG)
 3. Minimum number of religious groups for the establishment of religious oligopoly (OLIG)
 4. The structure of the population from viewpoint of the active religious affiliation (ACTRLG)
 5. The balance of legally constituted families (LEGFAM)
 6. The balance of multi-confessional families (MCONFAM)
4. Indicators of participation
 1. The intensity of religious implication (IRI)
 2. The average annual time spent in religious activities (ATRA)
 3. Rate of the religious migration (RRM)
 4. The coefficient of religious mobility (CRM)
5. Indicators of resources
 - 5.1. Indicators of patrimonial resources
 1. The total number of churches and other religious establishments (chapels,

monasteries, small convents etc.) (CHS)

2. Number of establishments with activities similar to religious ones (EAR)
3. Real estate owned by religious groups (REOR)
4. Other possessions (art, cars, aircrafts, ships, boats etc.) (OP)
5. Movable property and financial resources (MPFR)

- 5. 2. Indicators of human resources

1. Number of believers (BLV)
2. Number of "active" believers (church-goers) (ABLV)
3. Number of priests/ pastors/ imams/ rabies or other designations (PPIR)
4. Number of persons with management positions in the clerical body of the confessional organization (MNCG)
5. Number of monks or members of other forms of religious organizations

(MNK)

6. Number of subsidiaries (members like: scouts, youth, women, students etc.)

(SBSD)

7. Number of parishes or other forms of organization found in territory

(PRSH)

5. 3. Indicators of spiritual resources

1. Number of years since establishment (AGE)
2. Number of years since recognition (age) (AGER)
3. Number of centers - historic national cradles like (Putna, Curtea of Arges

etc.) (NHC)

4. Number of centers - historic international cradles like (Jerusalem, Mecca, and Bethlehem etc.) (IHC)

5. Number of canonized persons (CNZ)

6. Indicator of quality, efficiency and results

1. Types of religious organization (ORGT)
2. Types of financing (FINT)
3. Average annual number of religious celebration days (ACD)
4. Average annual number religious celebration days off the current activity

(ARCD)

5. The minimum age of one's can exercise power (MINAG)

6. Rate of canonization compared to the number of the centuries since recog-

nition (CNZR)

7. Financial resources attracted (FRA)
8. Believers parish ratio (BPR)
9. Believers clergy ratio (BCR)
10. Clergy parish ratio (CPR)
11. Rate of administrative positions within the clergy (RAPC)
12. Average age of a believer (AVGBLV)
13. Average age of a cleric (AVGCLG)
14. Number of people socially assisted by the religious institutions (PSAR)
15. The financial size of charitable actions initiated by religious institutions

(FINSAR)

16. Number of military/ paramilitary organizations sponsored the church

(MLT)

17. The degree of religious freedom (DRF)

1. Indicators of context

1.1. Indicators of political context

1. *Form of Government (GOV)*: is intended to set up the political context in order to subsequently study if this interferes in any way with the religious area. The possible options (in an selective list) are: (con) federation, anarchy, communism, dictatorship, constitutional monarchy, oligarchy, parliamentary republic, presidential republic, totalitarian system, socialism, ecclesiastic state, sultanate, theocracy etc.

2. *Type of legislative regulation in the religious area (LEG)*: in every country, there are laws and regulations in the religious area. It might be useful to characterize, on a ordinal scale, the legislative regulations of the religious area in a certain country. The laws may regulate one of the following: - absolute religious freedom; - religious freedom; - diminished religious freedom; - bound the religious freedom; - forbid the religious freedom.

3. *Connection type between state and church (STCH)* reflects, by definition, how the relation between state and church in a certain country is regulated. It might be useful to characterize the circumstances that exist in a certain country on a nominal scale and from the perspective of the separation between state and church. The indicator is measured on a nominal scale. This means that the most appropriate option from the list will be chosen. The bindery type can be: - separation⁴; - unification⁵; - transition⁶.

1. 2. Indicators of the economic context

From the many indicators that illustrate the economic context, the following draw attention:

1. *Gross Domestic Product per capita (GDPC)* is, by definition, the total volume (from viewpoint of value) of goods and services produced by a certain country within its borders in a specific period of time, related to the population number of that country. The indicator intends to allow international comparisons because relating Gross Domestic Product (GDP) to the population number shows also information about the level of work performance, thereby excluding difficulties in comparing countries of different sizes.

2. *The amount of financial resources drawn to "religious field" as percentage of GDP (AFRGDP)* represents the total volume of financial resources attracted by the religious institutions as percentage of GDP in a period of time. The indicator is intended to measure the financial level of the entire religious area, in order to subsequently make comparisons with other macroeconomic indicators from the point of view of international or inter-religious comparisons.

3. *Unemployment rate (UR)* represents the number of active persons in search of a job and are currently unemployed. This indicator is intended to measure the level of unoccupied working force on a 100 points scale.

1.3. Indicators of the socio-cultural context

One may include the following in the category of the socio-cultural indicators:

1. *Illiteracy rate (IR)* is, by definition, the ratio of people without writing, reading, or counting abilities from the total population, being at least 10 years old, calculated for a specific moment in time. Education is one of the key factors of human development. This indicator intends to express the degree of the lack of elementary education.

2. *Structure of the population from viewpoint of the ethnic affiliation (ETN)* is by definition the ratio of ethnic communities from the target population. This is a fundamental indicator used in the socio-cultural analysis in a determinate geographic area.

1.4. Indicators of the demographic context.

The category of demographic context indicators includes:

1. *The population (P)* represents the number of people that live in a specified territory. It is one of the most used, known, and recognized indicators and describes a certain geographic location. Therefore, this indicator represents a stage for subsequent complex analyses.

2. *General birth rate (GBR)* shows the number of newborns (by intensity) within a human population, measured in a specified period of time. Mainly, this indicator (associated with other demographic indicators) will permit analyses on future promises of the studied population or the causes that lead to certain evolutions in the past.

3. *General fertility rate (GFR)* shows the level (by intensity)/number of newborns within the female population of fertile age (15-49 years) in a specified period of time. Mainly, this indicator (associated with other demographic indicators) will permit analysis on future promises of the studied population or the causes that lead to certain evolutions in the past.

4. *General wedding rate (GWR)* is, by definition, the level (by intensity)/ number of marriages within the total population, in a specified period of time. The basic cell of society is the family. The religious institutions encourage the foundation of a new family. The indicator is a classic one and permits a quantitative measurement of status.

5. *General divorce rate (GDR)* reflects the number of divorces within the total population, studied in a specified period of time. The religious institutions discourage, in general, the divorce. Mainly, this indicator illustrates, from a quantitative perspective, the impact divorces have within society.

2. Primary indicators of classification in the religious system

In this subsystem the indicators monitor the place of religious institutions in the religious system.

The list of indicators:

1. *Number of divine persons (DVN)* represents the total number of people considered saints in a religious institution. The indicator enables the inclusion of certain religious institutions in the category of monotheist or polytheist religions.

2. *Birth rituals (rebirth) (RTBH)*. This indicator helps to emphasize the differences between the forms of manifestation with the occasion of birth. The aim is to subsequently accomplish classifications and statistical calculations based on various answers. A selective list of variants of answers is: - baptism through splash; - baptism through immersion; - public confession of faith; - ritual dances; - circumcision; - ritual fires.

3. *Marriage rituals (RMRG)*. Just like the previous indicator, this one is also intended to emphasize the differences between forms of manifestation with the occasion of marriage. The possible options (selective list) are: - public ceremony; - public ceremony with an important role for godparents; - public ceremony with an important role for bridesmaid/ best man (groomsman); - laic ceremony (only in front of the officiant).

4. *Mixed marriages (MXMRG)*. Is intended to present the procedure wherewith a

religious institution tackles a wedding ceremony between two partners belonging to different religious institutions. The indicator reflects the research of the procedural differences between different religious institutions regarding the marriage between partners of different religions. The purpose is to use the information for subsequent statistical integration. Possible variants are: - accept; - accept if the partner with another religion comes from an admitted religious institution; - interdiction.

5. *Ways to tackle divorce (WTD)*. The indicator intends to research the methods of the religious institutions to tackle the case of divorce. Possible variants are: - accept; - accept in specific situations (for instance: infidelity); - interdiction.

6. *Rites for death (RTDT)*. The indicator emphasizes the different forms of manifestation on a death occasion. Possible variants (selective list) are: - inhumation with public ceremony; - inhumation without public ceremony; - terrestrial cremation; - cremation on water; - mummification.

7. *Woman ordaining (WO)* emphasize the method wherewith a religious institution tackles the ordaining of a woman. Possible variants are: - accept; - interdiction.

8. *Active methods to promote "the truth" (AMT)* reflect the active forms wherewith a religious institution promotes (or promoted) the creed, the doctrine and/or lifestyle. Possible variants (selective list) are: - missionary activities; - ceremonials/ current rites; - public conferences; - peaceful politic decision⁷; - politic decision after a war; - pedlary activities.

9. *Passive methods to promote "the truth" (PMT)* reflect the passive forms wherewith a religious institution promotes (or promoted) the creed, the doctrine and/or lifestyle. Possible variants (selective list) are: - broadcasts on media channels⁸ or specialized channels; - with the help of educational systems or using educational channels; - with the help of medical assistance systems; - with the help of social assistance systems.

10. *Iconography type (ICONT)* represents the iconographic forms (if they exist) adopted and accepted in one of the current religious practices. Possible options (selective list) are: - painting⁹; - sculpture¹⁰; - bas-reliefs; - arras, embroideries; - miscellaneous objects (amulets, pipes, trumperies etc.); - gems (chainlets, lockets, armlets etc.); - gestic (the cross sign); - smoking accessories.

3. Indicators of level and structure

In this subsystem the indicators are:

1. *Number of existing religious groups (NRG)* represents the total number of religious groups legally constituted and recognized "as is" in a distinct geographical area (usually a country). The indicator measures the level of flexibility and easiness in obtaining a "license" for a certain communion. It reflects the degree of religious freedom, compatibility and interest on which raises a certain communion within a country. Practically, it counts the number of religious groups recognized by an authority.

2. *The structure of the population from viewpoint of the self declared religious affiliation (RLG)*. The indicator is a classical one and maybe the most common used indicator for the study of religious phenomena. Based on its results, international comparisons can be made or it can be characterize the existent type of "religious market". This indicator is calculated by relating the total number of persons affiliated to a religious denomination to the total population investigated. Facultative, the result can be expressed as a percentage by multiplication with 100.

3. *Minimum number of religious groups for the establishment of religious oligopoly (OLIG)*. By definition, represents the number of confessions, calculated on a descending sorted scale depending on the ratios obtained, assuring a limit percentage (%) of the total number of believers. The limit percentage can be set, for example, to a level of 80%. The indicator measures the degree of saturation/ diversification existent on the “religious market” in a certain location.

4. *The structure of the population from the viewpoint of active religious affiliation (ACTRLG)*. By definition, is calculated from the balance of religious institutions and the active religious population, taking into consideration the IIR.

5. *The balance of legally constituted families (LEGFAM)* represents, by definition, the specific weight of the family that is legally registered compared to the total number of families. The indicator shows, from a quantitative perspective, how the concept of “family - basic cell of society” is perceived in the daily practice.

6. *The balance of multi-confessional families (MCONFAM)* represents the number of families that consists of at least two believers of another religious institution compared to the total number of families. It intends to illustrate the degree of opening, freedom, and overcome of confessional barriers within a family.

4. Indicators of participation

Some of the indicators of the participation subsystem are:

1. *The intensity of religious implication (IRI)* is, by definition, the number of occasions when a person demonstrates an appurtenance to a certain religious community by assisting to church-service/ divine service. The indicator measures the active implication in the religious outpourings of a communion that a person belongs to. The intensity of the religious implication is an indicator that can be used in order to measure the degree of outpouring of the religious appurtenance even if this appurtenance is just a purely formal one. Not without importance is choosing the reference period for which IRI is calculated.

2. *The average annual time reserved to religious activities (ATRA)* represents the average number of hours that a person participates in religious activities in a year. This indicator can be much more accurate than IRI as it takes into account the effective time allocated to religious activities. The more hours allocated the religious activities, the more increased the participation rate. Although in the case of the production we can speak of substitution, in this case we can also detect ambiguity (for instance: can a consistent donation be equivalent to the participation in a certain number of religious activities?)

3. *Rate of the religious migration (RRM)* represents the number of people who change or give up a religion, compared to a reference term. The indicator illustrates the level of existing effervescence on the “religious market”.

4. *The coefficient of religious mobility (CRM)* shows the average number of religious institutions to which an individual is expected to appertain throughout his life. The indicator reflects the existing inertia among the believers from a certain location. It is tightly linked to the transfer rate, but the interpretation is realized in a larger picture.

5. Indicators of resources

The subsystem of indicators that look at religious funds is:

5. 1. Indicators of patrimonial resources

5. 2. Indicators of human resources
5. 3. Indicators of spiritual resources

5.1. Indicators of patrimonial resources

The indicators focused on patrimonial resources are:

1. *The total number of churches and other religious establishments (chapels, monasteries, small convents etc.) (CHS)* represents the total volume of units/ locations having as principal destinations religious practices. The main goal is to obtain the analysis of the status quo from a patrimonial viewpoint. Also, based on this indicator, other derivate indicators will be introduced.

2. *Number of establishments with activities similar to religious ones (EAR)* represent the total volume of units/ institutions/ locations belonging to the religious institutions but activating in a religious similar domain. The main goal is to study the implication of religious institutions in other activities than direct religious.

3. *Real estate owned by religious groups (REOR)* represents the total area of real estate owned by religious groups. Because of the different types of real estate (farming land, forest, ponds, orchards, vineyards, city land etc.) it is difficult to interpret indicator values. A solution would be grouping of the real estate by types as well as the assessment of the real estate.

4. *Other possessions (art, automobiles, aircrafts, ships, boats etc.) (OP)* represents the total value of the goods owned by the religious groups. The main goal is to estimate the mobile patrimony of the religious institutions in order to subsequently create comparisons (in time, inter, inter-regional, inter-religious, international etc.). Because the products are heterogeneous, the aggregation can't be achieved unless these possessions are assessed. Although, in the most cases, the stated goal of the religious institutions isn't a patrimonial one, yet the evaluation of the possessions unveil the magnitude of that institution.

5. *Movable property and financial resources (MPFR)* represents the total value of liquidities and other types of personal property (shares, bonds, debentures etc.) owned by a religious communion. Considering the fact that banking operations are confidential, a flaw of this indicator is the one based only on the transparency demonstrated by the religious institutions in its account books. Also, the value of movable property (shares, debentures) can have fluctuant values and, consequently, the value of the indicator is valid just for the reference period and comparisons can generate interpretation errors.

5.2. Indicators of human resources

1. *Number of believers (BLV)* represents the total volume of the population self-declared to belong to a certain religious communion localized in a geographic area and corresponding to a distinct period of time. The main goal is to measure and position every religious institution that operates in a particular geographical area. Secondary goals can be: assignation of budgetary financial resources (if applicable), assignation of places in the educational confessional system etc.

2. *Number of "active" believers (church-goers) (ABLV)*, by definition, represents the total volume of population self-declared to belong to a certain religious communion and to respect a minimum limit thresholds from viewpoint of IRI. This total volume has a geographic localization and a specific period of timed referenced and well delimited.

Additionally to C is a accuracy offered by the fact that only those persons who demonstrate an active religious appurtenance at least to a superior level of a fixed limit () in a specified period of time shall be declared as appertaining to a certain communion. A person¹¹ for who's annual IRI isn't at least equal to shall be included into the "no religion" category. For example in a period of one year could be set at the level of 12. The indicator refines a bit the religious appurtenance. There are many situations when the person declares to belong to a certain religion but, in fact, attends church only for Easter or Christmas. In these conditions, it is more accurate to include these persons in the "no religion" category.

3. *Number of priests/ pastors/ imams/ rabbis (PPIR)* represents by definition the total number of persons that have attributions to pastorate the parishioners of a religious organization. The indicator intends to study a religious organization from viewpoint of organization type and its capacity to show the religious services necessary to the parishioners is more accurate.

4. *Number of persons with management positions in the clerical body of the confessional organization (MNCG)* represent the total number of persons from the clerical body that have management positions in the organization of the institution. The indicator intends to study a religious organization from viewpoint of the organization type and compares different organizational systems from the viewpoint of size of management body.

5. *Number of monks or members of other forms of religious organizations (MNK)* represents the total number of persons from the institutionalized body of a church (others than the clergy - for example: monasteries and small convents). The indicator intends to study the size of the alternative forms of institutionalized manifestation.

6. *Number of subsidiaries (members like: scouts, youth, women, students etc.) (SBSD)* represents the result of a simple count of the subsidiaries (for instance: of scouts, of youth, of women, of students etc.) affiliated to a religious institution. The indicator intends to study the amplitude of the adjacent forms of organization within a population with certain confessional affiliation.

7. *Number of parishes or other forms of organizations found in territory (PRSH)* represents the total volume of the territorial organizations belonging to a certain religious institution existing in a specific geographical area. The indicator intends to emphasize the territorial organizational efficiency of an institution. For sure, the number of territorial organizations (of the parishes) illustrates the degree of penetration of a religious institution on a certain market. Thus, a new born religion can't have "subsidiaries" in any village. On the other hand, an infrastructure that is developed at all levels of territorial administration (even in villages) doesn't necessarily suggest a positive situation. The size of aparishis also of interest. This is because, through their nature, the religious services offered by a religious institution have an intimate character.

Consequently, the services shall show the quality of the relationship between the "supplier" (in most cases the priest/ pastor/ rabbi/ imam) and every parishioner. A good communication can be achieved rarely in a religious community of thousands and more often in one of hundreds.

5.3. Indicators of spiritual resources

The following are indicators for the spiritual resources:

1. *Number of years that passed since the establishment (AGE)* represents the num-

ber of years that passed since the establishment (the entry on a certain market) of a religious institution up to the present or up to the disappearance of that religious institution. The indicator intends to emphasize the spiritual patrimony owned by a certain religion materialized in the amount (measured in years) of time passed since the establishment of a religion. The establishment can be different from a geographical location to another. This is the case of religious institutions established many years ago that entered the market on a different location much later. In this case, it can be considered that the establishment of that religious institution at the second location is the moment of entry on the market and not the actual establishment.

2. *Number of years since recognition/ age (AGER)* represents the number of years passed since the official recognition in a certain location up to the present or up to the disappearance of that religious institution. The indicator intends to emphasize a part of the spiritual patrimony owned by a certain religion materialized in the amount (measured in years) of time passed since the recognition of a religion until present time. This indicator offers more accurate information than the number of years since the establishment. This is because the two moments (establishment and recognition) can be different. On the other hand, the development of a religious institution can be more vigorous in the period of time before official recognition (see the case of Christianity) and therefore, paradoxically, a longer period of time between the two moments can be positive.

3. *Number of centers - historic national cradles like (NHC)* (Putna, Curtea of Arges etc. in Romania's case) is the value resulted from the simple counting of the centers considered historic national cradles. The indicator intends to emphasize the amplitude of the spiritual patrimony of a religious institution, amplitude measurable in the number of historic national cradles of a religious institution. The difficulty appears when it comes to differentiate the self-declared historic national cradles and the ones truly recognized.

4. *Number of centers - historical international cradles like (Jerusalem, Mecca, and Bethlehem etc.) (IHC)* represents the value resulted by simply counting the centers considered historical international cradles. Obviously, from a chronological viewpoint, a certain historic cradle shall first have a national importance (and will be included in the calculated indicator NHC), importance whose amplitude increases, in the end being counted with the IHC indicator. The problems that appear in this case are similar to those encountered by historical international cradles that are claimed by several religious institutions (for instance Jerusalem). These conflicts of interests on a certain location can lead - and unfortunately it does happen so - to armed conflicts.

5. *Number of canonized persons (CNZ)* - represent the total number of canonized persons (if applicable - even though there are religious institutions that don't have such persons) in the years since establishment. The counting of the canonized persons intends to emphasize the size of the canonization phenomenon, given the fact that the procedures are strict and the inclusion of a person in this category involves a way of living and some extraordinary accomplishments throughout one's life and even after death. The problems that may appear with the CNZ indicator are related to the fact that not all religious institutions have such a procedure and imply that the inter-confessional comparison would sometimes lose its substance. Secondly, the following situation may appear, when a common inheritance¹² leads to the duplication of the canonized persons.

6. Quality indicators, efficiency, and results

The following indicators are parts of this subsystem:

1. *The type of religious organization (ORGT)* emphasizes the organizational structure of the church and the way in which the administrative positions are filled. The possible options (selective alphabetic list) are: - autocephaly; - autocratically; - free church; - church the state; - congregational; - democratic; - meritocratic; - non profit organization; Theocratic - etc. Sometimes the placement in managerial schemes and prints is hard to achieve. From these considerations it is very important that the options from which the choice shall be made for a certain religious institution.

2. *The type of financing (FINT)* states the methods of financing for the purpose of subsequent statistical remarking. The possible options (selective list) are: - budgetary state allocations; - voluntary contributions of the parishioners; - parishioner's compulsory contributions; - personal income (from rents, from sales candles, groundsels, books etc.); - donations. It is obvious that as the sources of income diversify or, better said, the state contributions minimize, a religious institution can truly claim its independence from the state. Regardless of the fact that, currently, the church-state separation¹³ takes place in many parts of the world, the integration of income sources in mandatory or voluntary contributions (of the parishioners) is sometimes hard to make. This happens because some contributions are considered mandatory even if the religious institution that receives them sustains that they are voluntary.

3. *The average annual number of religious celebration days (ACD)*. This measures - from a quantitative point of view - the level and, subsequently, the dynamics of religious holidays. A distinction between current holidays and holidays that involve halting the current activity is necessary.

4. *The average annual number of religious celebration days off the current activity (ARCD)* represents the average annual number of religious holidays with halting of the current activity within the last "n" years. With the help of this indicator research inter-confessional or international respondents could be done. Nevertheless, this indicator could follow the impact these religious holidays have on the total of available labor background and, by default, on economic activity. Nearly each religion has a day of the week when, theoretically, the lucrative activities are forbidden. To these we add the religious big holidays (for instance Christmas etc.).

5. *The minimum age when one can exercise power (MINAG)* represents the minimum age whereof a person can be officially accepted as member in a religious institution. A very low value (for instance: 0 Years) of the indicator level suggests that, in fact, the affiliation is don not by rational choice at a more mature age but chosen by the adults responsible for that child. On the other hand, nothing prevents a person appurtenant to a religious institution to become affiliated with other religious institutions.

6. *The rate of canonization compared to the number of the centuries since recognition (CNZR)* is the number of persons that were canonized in a religious institution within an accounted period. The indicator tries to commensurate the scope of the canonization phenomenon through the fact that not only the absolute value of the canonized person counts but also the period of time needed for canonization. Some problems appear in this case regarding the fact that not all the religious institutions have procedures of canonization and/or persons canonized. In this context, the inter-confessional comparison becomes, sometimes, superfluous.

7. *The financial resources attracted (FRA)* represents the total volume of financial funds attracted by a religious institution within a period of time. The indicator intends to compare the financial level of a religious area in order to make correspondences with other macroeconomic indicators from an international or inter-religious perspective. The results of this indicator allow for statistical conclusions from a structural point of view (compared to RLG indicator) regarding the concentration/ diversification of the funds. A flaw of this indicator is that, usually, it is based on estimations. The reason is the absence of clear reports of several religious institutions regarding these levels of income.

8. *The believers-parish ratio (BPR)* represents the average number of believers of a parish or another form of territorial organization. Obviously, from a proficiency perspective, a bigger parish has more financial resources and a higher economic efficiency than a smaller size parish that involves a waste of pecuniary funds. On the other hand, we consider that, in a smaller parish, the quality of the relationships between priests/ pastors/ imams/ rabbis and the parishioners they serve is higher. In this direction, the indicatory level BPR shows a compromise between the judicious administration of financial funds, involving a rise of the indicator, and keeping good relations between the parishioners and the priest/ pastor/ imam/ rabbi. The indicator's interpretation would have to consider the fact that there are parishes with several priest/ pastors/ imams/ rabbis and that there are also priests/ pastors/ imams/ rabbis which serve in more parishes simultaneously.

9. *The believers- clergy ratio (BCR)*. The indicator brings additional information besides the BPR as it is no longer influenced by the presence of more or less than one cleric in a provost. This time, the equilibrium that one must search for in the funds management- with an efficient administration from financial viewpoint as the BCR rises - has in counteraction the fact that the human relations have a better quality as the indicatory level BCR diminishes. In the case of inter-religious comparisons, one has to take in account the management of religious institutions. This is due to the fact that there are confessions that do not have any stipendiary clericals and the administrative duties are done by the laics.

10. *The clergy- parish ratio (CPR)*. The value of this reference indicator is 1. An unitary result involves a clerical apparatus that could seem oversized. But there are religious institutions that have a pastor in a parish that deals especially with a certain social category (for instance: A pastor for youth). In such situations, the output indicator is affected accordingly. A value sub unitary doesn't mean an insufficient clerical apparatus as there are religious institutions that grant a great importance to the laic implication in the religious administration and, as a consequence, the clerical apparatus has a somewhat reduced amplitude.

11. *The rate of administrative positions within the clergy (RAPC)* is by definition the weight that a person has in the management¹⁴ of the clerical apparatus of a religious institution. The indicator wants to commensurate the financial level of a religious area in order to subsequently compare it with other international and inter-religious macroeconomic indicators.

12. *The average age of believers (AVGBLV)* is the average number of years that a person of 0 years, affiliated¹⁵ to an institution is expected to live. The indicator is a particular case of a well known indicator "life expectancy at birth" (LEB). If the AVGBLV indicator is calculated at a national level and for all the religious institutions simultaneously, then it coincides to the LEB. If the population from which LEB is calculated is the population affiliated to a specific religious institution then we shall consider this partic-

ular case AVGBLV. The reference value of AVGBLV is the indicatory value of LEB in the geographic area. Superior values of the indicator for religious¹⁶ institutions can indicate the fact that a religious institution is successful with an older population and that the life style of the persons affiliated to the respective religious institutions led to a better state of health and , consequently, to the enlargement of average age. An analogue explanation can be formulated when the indicatory value AVGBLV is inferior to that of LEB.

13. *The average age of clergy (AVGCLG)* is, by definition, the average age of the clerical body affiliated to a religious institution. The reference which can help with the precise interpretation can be constituted by taking in consideration the legal work interval of the respective country for the remunerated activities. Thus, in Romania, for men this interval is 16-65¹⁷ years. If we take into consideration that preaching activities can begin after college graduation, we can consider that the interval of interest is 23-65 years. The average active age would be, in this case, 44 years. It must be considered also the fact that there are members of clergy with lifetime activities (for instance: head of Romanian Orthodox Church - Patriarch Teoctist). Considering the reduced size of personnel that prolongs its activity after retirement age, the reference age of 44 years can be successfully used.

14. *The number of people socially assisted by religious institutions (PSAR)* is calculated as the total number of persons socially assisted directly by religious institutions or by charitable institutions controlled by religious institutions, within a specific period of time. The main goal is to expose the social and charitable role of religious institutions, as well as the scale of this phenomenon.

15. *The financial aspects/size of charitable actions initiated by religious institutions (FINSAR)* is, by definition, the whole volume of financial funds used by the religious institutions with charitable purposes in a certain period of time. The indicator seeks to measure the financial level of the efforts that religious institutions or specialized units affiliated with them made within a certain period of time. When talking about an indicator that measures the financial aspects of the charitable activity, we will certainly underestimate the reality. This is because there are many activities that don't involve financial funds but involve great voluntary time involvement of people affiliated to religious institutions. These activities are difficult to approximate as their temporal size, as well as their financial estimations¹⁸.

16. *The number of military/ paramilitary organizations sustained¹⁹ by the church (MLT)* represents the value that results from the simple addition of these types of organizations affiliated with a religious institution. The indicator seeks to study the amplitude of the forms of military organization affiliated to religious institutions.

17. *The degree of religious freedom (DRF)* is, by definition, the value of an index obtained by analyzing the religious freedom in a certain geographical area. The indicator seeks to analyze the religious freedom from the quantitative point of view on a predefined interval.

A card/table was made for each indicator presented previously. The following is an example of such a indicator's card:

Conclusion

The entire model presented above is, obviously, a perfectible one. Without claiming that we finished the discussion about the complex matter of the religious systems,

Indicator	Average Annual Time Spent in Religious Activities
Characteristics	
Definition	The annual average number of hours spent by a person for religious activities.
Purpose	By taking in consideration the actual time spent, this indicator shows religious activity participation degree more accurately than simple count of mass participation.
Symbol	ATRA
Calculus method	It counts the effective time (number of occasions and their length) which a person has spent in religious activities in a certain period of time.
Formula	$ATRA = \sum x_i \cdot t_i$ Where: x_i – religious activity type (regular, wedding, baptism, funeral, Easter, Christmas, church committees, choir practicing etc.) t_i – length (in hours) of x_i activity
Data needed	The number of occasions and the length persons from a specific population have spent in religious activities (mass or other activity) during a year.
Source of data	Statistical surveys, Religious bodies, National Institute of Statistic
Type	data type: average; measurement scale: continuous; computation: derivate; time point of view: moment
Class/ category	Participation indicator
Aggregation level	local, county, regional, national, continental, global, by gender, by residential areas, by religious affiliation etc.
Interpretation	As the average number of hours is rising, the participation degree is rising, too. However, even if in economical terms, when speaking of production factors we deal with substitution. Here, we can introduce fine levels of religious approaches (i.e.: a consistent donation can be equivalent of a number of religious activity participation?)
Quality standards	The advantage of using this indicator consists not only in the possibility of counting the (regular) mass hours but also in the possibility of adding hours spent in additional activities: choir, church committees, parishes councils, charity actions, propagandistic actions, self study, family religious activities etc.

we tried to create a conceptual, methodological frame, which can help with the study of this system from a quantitative point of view.

The main advantages of using the system of statistical indicators for the study of religion will be: a correct and complete operational description, the possibility of using some descriptive or analytic statistical methods, the possibility of studying religion in a systematical way and, never the less, the possibility of making comparisons (regional, international, inter-confession etc.).

One of the main difficulties that appear in the case of applying this incorporate system of indicators is due to the fact that, for most of the indicators, there aren't organized systematic gatherings of data. Or, at least, the information isn't collected in a structured way in order to make these analyses.

The scientific validation of this system can only be made as a result of emendation and improvements that may come from a practical study or from the academic community, institutions or persons interested to study this matter.

Selective bibliography

Anghelache, C., Isaic-Maniu, A., Mitrut, C., Voineagu, V. *Sistemul conturilor nationale*, Ed. Economica, Bucharest, 2005

Isaic-Maniu, A. (coord.), Pecican, E., Ștefănescu, D., Voda, V., Wagner, P. *Dictionar de Statistica Generala*, Ed. Economica, Bucharest, 2003

Jonhnstone, J.N. Indicators, Educational. In: T.Husén, T.N. Postlethwaite (editors) *The International Encyclopedia of Education*, Pergamon Press, Oxford, vol. V, 1985, p. 2432-2438

* * * *The Holy Bible*, New International Version

* * * Law no 53 dated January 24th 2003 – Labor Code – and its later updates,

Bucharest, 2000

* * * Law no 19 dated March 17th 2000 - and its later updates, Bucharest, 2003

* * * http://en.wikipedia.org/wiki/Separation_of_church_and_state accessed on July 15th, 2006

Notes:

1 The main line of this paper (a list of indicators) was presented at 13th Students' Symposium on the Study of Religion & 1st European Students' Symposium on the Study of Religion, 2006, University of Marburg - Germany

2 Isaic-Maniu, A. (coord.), Pecican, E., Ștefănescu, D., Voda, V., Wagner, P. Dictionar de Statistica Generala, Ed. Economica, Bucharest, 2003

3 Jonhnstone, J.N. Indicators, Educational, In: T.Husén, T.N. Postlethwaite (editors) The International Encyclopedia of Education, Pergamon Press, Oxford, vol. V, 1985, p. 2432-2438

4 For example, the situation of: USA, France, Germany, Israel, Japan, Mexico etc.

5 For example, the situation of : Egypt, Finland, UK, Greece

6 For example, the situation of Russia

7 Similar to the case of Saints Constantine & Helen

8 Like: written press, radio, cinema, computer games, books, Internet etc.

9 On different surfaces: glass, wood, canvas, walls, paper etc.

10 On different surfaces: wood, stone, metal etc.

11 Although a more accurate definition of an active believer would be one that takes credit of: - presense to confessions/divine services; - involvement in adjacent activities (choir, committees etc.); - financial backup; - abidance by the meatless days; - proselytism; - activities of promoting the church/communion; - being employee of a religious institution; - activities o corvee; - retiring in monasteries.

12 For example, the situation of the Orthodox Christian Church and the Catholic Church

13 One exception in this case would be Iran.

14 Best criteria for differentiate a management position from a usual position is perhaps an extra salary.

15 This is about an official affiliation (for example: Orthodox Church) or it is just a claimed affiliation of child's tutors.

16 Although there could be some other explanations. Thus, in Romania, the elderness of Greek-Catholic believers could be explained by the fact that they had the opportunity to declare themselves affiliated to the Greek-Catholic Church mainly those believers who were affiliate to this church before it was declared outlaw by the communist in 1948. Forty years later, the Greek-Catholic Church was reinstated, so it regains its believers in those who survived this period.

17 According to the Romanian Law no 53 dated January 24th 2003 - Labor Code - and its later updates and according to the Law no 19 dated March 17th 2000 - and its later updates (acording to http://www.cdep.ro/pls/legis/legis_pck.frame accessed in July 16th 2006).

18 There are estimations of financial flows that would be necessary for counter-part of services otherwise offered pro-bono by religious affiliated people. Another reason for this, would be that The Holy Bible itself says in Mathew 6:2-3 "So when you give

to the needy, do not announce it with trumpets, as the hypocrites do in the synagogues and on the streets, to be honored by men. I tell you the truth, they have received their reward in full. But when you give to the needy, do not let your left hand know what your right hand is doing [...]”; and therefore charity activities are mostly not mediated.

19 It is obvious that the affiliation (supporting) could be an unofficial one.