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THE PROVINCIAL COMPETITIVENESS REPORT

ULAANBAATAR
2018

ECONOMIC POLICY AND COMPETITIVENESS RESEARCH CENTER

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FOREWORD



The Economic Policy and Competitiveness Research Center is presenting you the seventh Provincial Competitiveness Report at the dawn of the New Year and before the upcoming Lunar Year.

Analyzed with 181 criteria, this report is published annually in both printed and electronic formats, while being politically independent. Some people ask me if there is any need for publishing the Provincial Competitiveness Report every year. The very need lies in the fact that one can see the development trends of each province by analyzing the data with same methods every year.

A country's competitiveness is measured by productivity and efficient working environment for companies, and for nations, prosperity and opportunities to be able to choose. This report reminds me that it is time for local administrations to create business environment for local companies to be more productive and profitable, and to raise the sense of responsibility regarding well-being of the locals. Also, it is time for the locals to urge local administrations regarding their duties.

Shall we make history by ourselves? Or fly like a tumbleweed in the wind of history?

We do not only produce reports but also organize regional forums to discuss the report results. For instance, "Central Region Competitiveness Forum: Today's Decision, Tomorrow's Reality" was organized on October 26th, 2018 in Darkhan-Uul province.

On behalf of the research team, I would like to express my sincere gratitude to the GIZ's Integrated Mineral Resources Initiative and the Asia Foundation.

Development of Mongolia should start from local development. Regardless of where he or she is living, any Mongolian has the right to receive all public services in equal and fair way. Government, business entities and citizens need to raise the sense of responsibility and work together for our country. We will prosper, once we come together to make efforts.



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FOREWORD

Why does the competitiveness of aimags matter? Being competitive matters, because conditions conducive for business and good governance open economic opportunities and create jobs in the aimags. This provides the local youth with a positive economic outlook, adults with a stable and rising income and elder people with economic security. Competitiveness brings about higher economic efficiency, which leads to higher levels of welfare and counters migration out of the aimag. Making use of local comparative advantages for economic development translates into productivity and economic diversification and thus strengthens competitiveness. Local resources are processed locally reducing transportation costs and ensuring that benefits remain in the area. Local human resources and knowledge as well as traditional techniques are made productive and environmental impacts negotiated among the local stakeholders. This nurtures a positive feed-back loop with an incremental rise of competitiveness.

The effect of a competitive local government and good governance is an efficient, effective and transparent provision of public goods such as education, infrastructure, security and health care services, which in turn promotes business growth and job creation. Without good public services and good governance, the aimag's population seeks opportunities elsewhere. The more people, who move out of the Aimags, the less resources such as human labour and knowledge or budget for the local government are available to improve the local situation. A circle of deterioration sets in.

What does the Provincial Competitiveness Report of EPCRC contribute to increasing the competitiveness of aimags? It gives insights about strengths and weaknesses of aimags regarding 16 sub-factors and 180 criteria, helps the aimags to find the main endogenous and exogenous drivers for strengthening competitiveness, and enables aimags to learn from each other. Therefore, the Provincial Competitiveness Report contributes to an overall development of the effectiveness and efficiency - the competitiveness - of the aimags. The report compels the aimags and development partners to define what is meant by "competitiveness". This is crucial to translate goals into action and prevents the use of empty buzzwords. The structure and categories of the report provides help aimags to identify crucial elements of competitiveness and to formulate action plans. The possibility to compare with different aimags gives an additional incentive to strive for excellence, which results in also the last-ranked aimags to being on a relatively high level of competitiveness. Furthermore, EPCRC's comprehensive and profound report gives orientation to the public and to investors.

IMRI/GIZ appreciates the Provincial Competitiveness Report of EPCRC highly, as its aims are in line with IMRI's goal to increase competitiveness in aimags. IMRI does this on the one hand through promoting the growth of small and medium sized enterprises (SME) with partly sector-specific business training and consulting, and special funds for tourism and innovation. On the other hand, through supporting the establishment of Sustainable Development Partnership Councils by local Khurals, which engage a wide array of stakeholders in elaborating economic development policies in the aimags. This inclusive institution ensures that the voice of the people is heard in the making of economic strategies and thus facilitates their implementation. Inclusion of all talents and ideas Mongolians offer is the key path to competitiveness.



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The Asia Foundation

The Asia Foundation



Implemented by

giz

Deutsche Gesellschaft
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Integrated Mineral Resources Initiative



Mongolian National Chamber of Commerce and
Industry, Regional Branches

STATISTICAL DATA SOURCES



National Statistical Office



Bank of Mongolia

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SELENGE	92
TUV	96
UVS	100
KHOVD	104
KHUVSGUL	108
KHENTII	112

Abbreviations

BoM	Bank of Mongolia
EPCRC	Economic Policy and Competitiveness Research Center
GDP	Gross Domestic Product
IRMI	Integrated Mineral Resources Initiative
MNT	Mongolian National Currency (Tugrug)
NSO	National Statistics Office
SME	Small and Medium Enterprises

A TRANSITION FROM QUANTITY TO QUALITY

According to last year's provincial competitiveness report, the governance efficiency presented a declining trend. In order to clarify the reasons, a qualitative survey of governance, one on one interviews with business entities and public servants was carried out in some of the provinces. Some highlights of the interviews with business entities about provincial governance and public services are shown below.

- Lack of information on budget spending for civilians and business entities.
- Even though there are works being done on strengthening the transparency of local tendering processes, a low confidence on fair tendering processes was observed among the respondents.
- Regarding public services, "One Stop Service", e-office and ISO 9001:2015 were introduced to some provinces with the purpose of delivering public services fast and inclusively which can reduce bureaucracy in the future.
- Lack of efficient local policy to support business entities.
- The number of companies with female directors who were selected as tender executors and financed by Local Development Fund was relatively low, 8.7%-18.55% of the total projects.

Furthermore, the biggest influencer to the provincial governance efficiency changes was the political environment including election results, changes of the government officials, tendency to prefer political party interests, political affiliations or politicization according to the business entities.

The goals of the long-term development policy of Mongolia to be achieved by all the provinces and civilians by 2030:

Table-1: Some goals reflected on the development policy of Mongolia¹

Indicator	2014 (Base level)	2017	2030 (Target level)
Poverty rate	21.6	39.6 (2016 Year)	0
Life expectancy	69.6	69.89	78
Share of main fuel products supplied from domestic production	0.0	0.0	100

Sustainable development governance has set the goal of ensuring sustainability, continuity of government policy and strengthening the coherency of sectors. However it was observed from the interview with business entities that there was a gap in continuity and sustainability of government policy.

What about a development tendency in provinces?

Development Quadrants

First of all, how the main factors have changed in the provincial competitiveness report since first launched.

Over the past years, "Economic performance" has increased by 16 points, "Government efficiency" by 14 points, "Infrastructure" by 7 points whereas "Business efficiency" has decreased by 2 points.

"Development Quadrants" is defined by the equal growth in the four main factors unlike a dominance in either one of the factors.

¹ Mongolian Sustainable Development Vision 2030

Figure 1: Average score changes in the four main competitiveness factors

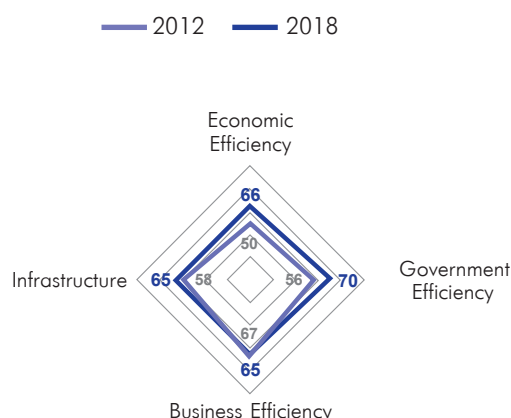


Figure 1 shows that a local development has been improving each year.

Let us check whether the local development has been really improving or not by looking at some numbers.

Table-2: Statistics of 2012-2017

	2012	2017
Proportion of provinces in national GDP	33.4	35.3
Inflation	14.3	4.3
Unemployment	8.2	8.8
Employment rate	58.3	55.8
Average wage	557,600 tugrug	944,500 tugrug
Grants from central government to local government	42 Billion MNT	146 Billion MNT
A share of population living in Ulaanbaatar city	45.9	46.0

Source: National Statistics Office¹

Table-2 indicates that there is an increase in proportion of provinces in national GDP, grants from central government to local government and average wage whereas a decrease in inflation. Despite the positive changes there were some negative ones such as a decrease in employment rate and an increase in unemployment. Highlights from the changes in regions:

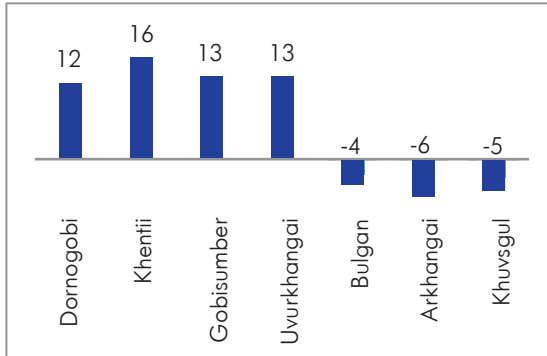
- While the 21 provinces have altogether produced 33.4% of the total GDP in 2012, the number was increased to 35.3% by 2017. The increase in the share of GDP was mainly due to increase in the Western, Khangai and the Eastern regions. On the other hand, the GDP share have declined in the Central region.
- Unemployment rate was increased to 8.8% in 2017 from 8.2% in 2012. In terms of the regions, the rate declined in the Eastern region but increased in the others.
- Employment rate has increased to 55.8% in 2017 from 58.3% in 2012. In terms of the regions, the rate has declined in the Western, Khangai and the Eastern regions but increased in the Central region.
- Average wage was increased by 70%, or from 557,600 to 944,500 during 2012-2017. In terms of the provinces, Arkhangai, Bulgan and Gobisumber had the lowest growth which was 18-21%. On the other hand, Dornod, Orkhon and Khentii had the highest growth or 64-72%.
- Grants from the central government to local governments have increased to 146 billion tugrug in 2017 from 42 billion tugrug in 2012. Most of the grants was distributed to the Western and Khangai regions.
- A share of population living in Ulaanbaatar city has increased to 46% in 2017 from 45.9% in 2012.

Highlights from this year's report...

According to this year's rankings, competitiveness scores of Orkhon, Darkhan-Uul and Umnugobi have been continually been relatively high. Highlights from this year include improvements in Dornogobi, Khentii, Gobisumber and Uvurkhangai and declines in Bulgan, Arkhangai and Khuvsgul.

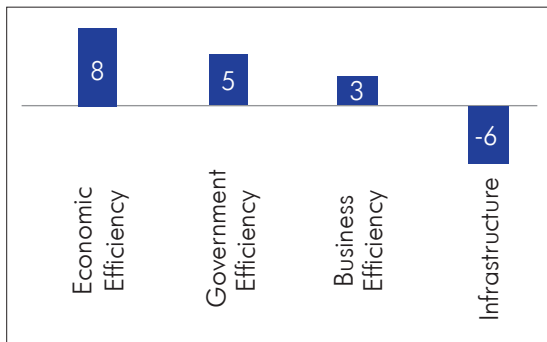
¹ www.1212.mn

Figure-2: Score changes in the "Provincial Competitiveness Report 2018"



You can see from the economic performance factor that the scores of 17 out of the 21 provinces have increased whereas the rest has decreased. However the infrastructure factor has decreased by 13 points. It can be explained as there is not enough work for improving infrastructure even though the economy is getting better in general.

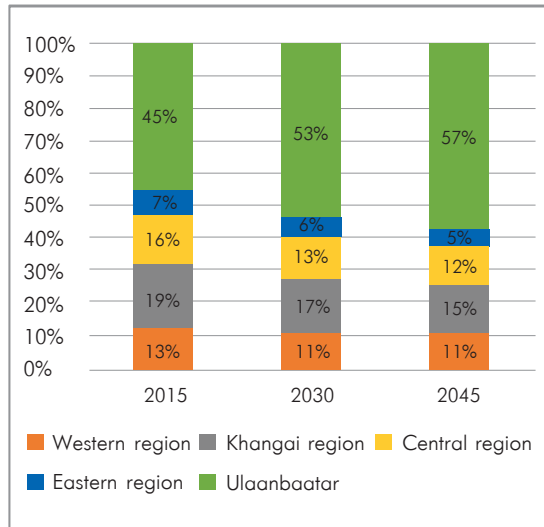
Figure-3: Average changes in competitiveness / compared to last year/



This year, the infrastructure factor has declined and three other factors have increased which is an exact opposite result compared to last year.

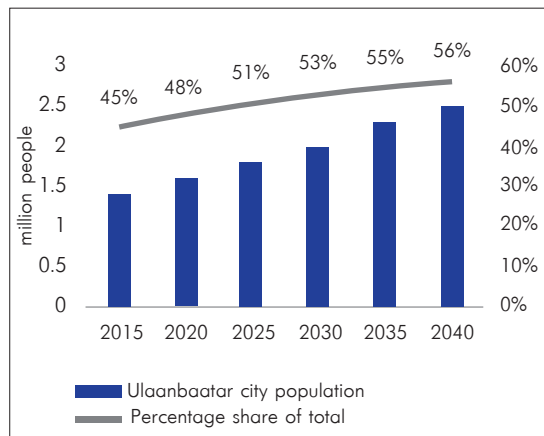
According to the National Statistics Office, a share of population living in Ulaanbaatar city will reach 53% by 2030 and 57% by 2045, as long as there are not any improvements regarding job opportunities, proper living conditions and industries and services met with the public demand.

Figure-4: Population, by regions



Source: National Statistics Office

Figure-5: Ulaanbaatar city population projection



Source: National Statistics Office



PRINCIPLES OF ANALYSIS AND METHODOLOGY

THE PURPOSE AND IMPORTANCE OF THE RESEARCH

The purpose of Provincial Competitiveness Research is to make a comparative evaluation of the current competitiveness of 21 provinces in Mongolia and to define their competitiveness holistically. This study identifies the strengths and weaknesses of each province and evaluates their potential to compete, thereby creating a database that is useful for developing a stable, long-term development policy.

The provincial competitiveness index would give us an opportunity to observe any improvement and changes in provincial competitiveness, because this study will be conducted every year according to the same set of methodologies.

Besides comparing the competitiveness of the provinces, this research helps to identify factors that influence the provincial competitiveness either positively or negatively and evaluate the competitiveness strengths and weaknesses. Moreover, this becomes an important source of ammunition to determine which province is more competitive and which is not by addressing factors that drags down the provincial competitiveness.

The concept of provincial competitiveness is a relatively new notion and aims to investigate how efficiently a particular province is allocating its resources and potentials, thereby creating its own competitiveness and enabling a favorable business environment rather than merely studying its dominance. For these reasons, we ranked the provinces by comparing a particular province against others questioning, whether they could create a favorable environment for preserving their competitiveness edges and supplement

the existing advantages. In other words, this report pursues the question of whether a certain province enables local business efficiency and prosperous life for its residents through effective allocation of resources and by exploiting its advantages.

Since this research is designed to compare the provincial competitiveness, those that are ranked top in the list should not necessarily be the best performers. Although they are more competitive than the others, those provinces should promote their incompetency by using its resources effectively and exploiting its advantages. Likewise, those ranked lower in the list should not consider themselves to have poor competitiveness, but rather, they should see themselves as having lower competitiveness than the other provinces and should learn from other provinces and address the factors that are lowering their competitiveness.

For policy makers, the report on provincial competitiveness will be an important source of knowledge and handbook which would help them evaluate the current situation and level of provincial development and to make more effective policies to develop rural areas. Also, it makes for provincial administrators it possible to estimate the results of their implemented policies, to make comparisons with other provinces and learn from their experiences. Likewise, businessmen can get reliable and holistic information from this report when making business or investment decisions.

COMPETITIVENESS CRITERIA

It is impossible to evaluate the provincial competitiveness solely by means of GDP per capita and unemployment. Because there are many factors such as economic, political, social as well as cultural that influence prosperity of a province and living standards of its citizens.

Within the framework of this research we adopted the same main 4 factors for measurement, the methodology used in the Mongolia in World Competitiveness study – produced by EPCRC in conjunction with the World Competitiveness Center. Some sub-factors within the main factors were replaced through another set of criteria that could reflect the uniqueness of provinces and create more in-depth comparisons.

Economic Performance, Governance Efficiency, Business Efficiency and Infrastructure are the 4 main factors which are divided into 4 sub-factors of each. These 16 sub factors comprise of 181 criteria (made some changes for this report) in total.

In Economic Performance section, 4 sub-factors of criteria are: macro economy, development of economic sectors, standard of living and employment. A total of 37 criteria were used.

In Government Efficiency section, provincial policies to encourage competitiveness and its spectrum were evaluated by 4 sub-factors of parameters: Provincial budget, institutional framework, business legislation and societal framework. There are 31 criteria in total.

In Business efficiency sector 31 criteria of 4 sub-factors business environment, labor market, management practices and productivity, were used in order to study the capability of provincial business sectors to act efficiently and with responsibility and as an entrepreneur.

Infrastructure involves 77 criteria within following 4 sub-factors of criteria: basic infrastructure, technological infrastructure, education and culture and health and environment.

This way, the competitiveness of provinces was evaluated according to 176 criteria, and this enables in depth evaluation of provincial competitiveness and prevents any biased influence which may have an impact on the general assessment of provincial competitiveness. These criteria were used to create competitiveness indices in each of the 21 provinces.

Economic Efficiency	Government Efficiency	Business Efficiency	Infrastructure
<ul style="list-style-type: none"> Economy Economic Sectors Standard of Living Employment 	<ul style="list-style-type: none"> Provincial budget Institutional Framework Business Legislation Societal Framework 	<ul style="list-style-type: none"> Business Environment Labor Market Productivity Finance Management Practices 	<ul style="list-style-type: none"> Basic Infrastructure Technological Infrastructure Education and Culture Health and Environment

DATA AND INFORMATION SOURCE

The Provincial Competitiveness Index uses two types of data for the computation of competitiveness. These are:

- Hard data (statistical data)
- Executive opinion survey

Of all the 176 criteria to measure competitiveness, 102 or 3/5 rely on hard data whereas 74 or 2/5 rely on executive opinion survey. Of the hard data, 28 criteria or 15% are informative criteria intended to give general information but not used in computing the competitiveness.

Hard data measures competitiveness over a specific period of time (for the past one year e.g.) and indicates how the competitiveness in each criteria is performed (for example, in terms of GDP). On the other hand, executive opinion survey is used for measuring qualitative data that could not be easily measured. Moreover, opinion surveys are used to verify hard data results, clarify and reflect, how the public and businessmen evaluate the current situation. Therefore, compared to hard data the survey responses reflect perceptions of competitiveness through business executives' perception who are dealing with local business situations. Their responses are more recent and closer to reality since there is no time lag, which is often a problem with hard data that show a "picture of the past".

Executive Opinion Survey

The Executive Opinion Survey was sent to executives in top and middle management in all of the provinces covered by the report. The survey questions are designed to accurately reflect their perspectives on the business environment and competitiveness of the province.

We believe the survey results would provide us with good insights as the survey respondents are experienced and knowledgeable local professionals working in the field.

In order to be statistically representative, we selected a sample size randomly from each of the 21 provinces proportional to GDP of the provinces. Moreover, to avoid from non sampling errors, we expanded the survey size and surveyed a total of 1050 executives which is equal to 50 executives on average for each province.

The survey contained 74 closed questions and 1 open question. The respondents assessed the competitiveness issues by evaluating the questions on a scale of 1 to 10. Scales of 1-5 indicate negative perception on the question, whereas those of 6-10 indicate positive perception. The average value for each economy is then calculated according to which the rankings are determined.

METHODOLOGY OF COMPUTATION OF PROVINCIAL COMPETITIVENESS INDEX (PCI)

We used 148 of the 176 criteria in computing the competitiveness index (28 criteria for background information were not included in computation). The following steps were used in computing the PCI:

1. Calculating standardized value

The essential building block for the rankings is the standardized value for each individual criterion. Computing the standardized value is important mainly because it enables to convert data with different scale unit obtained from statistics and survey to the same comparable measurement.

Standardized values are computed for each criterion and each of the 21 provinces according to the following formula.

$$STD(x) = \frac{x^i - \mu}{\sigma}$$

Where:

- x^i – i value of the criterion of the province
- μ – x mean of x value
- σ – x standard deviation of x value

All criteria were reviewed to determine the shape of the distribution before calculating the standardized value. In case of not normally distributed data, the standardized value was calculated from normalized data by taking the logarithm.

In most cases, a high value is considered to be good and the province with the highest standardized value is ranked first, while the one with the lowest as the last. However, with some criteria the inverse may be true, where the lowest value is the most competitive, for example, poverty rate and maternal mortality rate. In such cases, standardized value is multiplied by (-1).

2. Criteria ranking

Provinces are ranked based on the mean of the standardized values of the 148 ranked criteria. The higher standardized value indicates more competitive provinces and the provinces are ranked from the most competitive to the least competitive.

3. Calculating the competitiveness index and overall ranking

Each of the four main factors of competitiveness is divided into the four sub-factors. The standardized value means of each of the 16 sub-factors for each province are obtained by computing weighted mean of the standardized values. Each sub-factor, independently of the number of variables it contains, is assigned an equal weight of the overall ranking ($16 * 6.25\% = 100\%$). Thus, the weight of the sub-factors will be consistent and the results would be more reliable. It also blocks any diverted impact on other factors in cases of errors and omissions in statistics.

The competitiveness index of 16 sub-factors of each province which based on mean standardized value are calculated using the following formula.

$$I = \frac{STD(x) - STD_{min}(x)}{STD_{max}(x) - STD_{min}(x)}$$

Where:

I – competitiveness index

$STD(x)$ – standardized value of the criteria

$STD_{min}(x)$ - minimum value of the standardized value of the criteria

$STD_{max}(x)$ - maximum value of the standardized value of the criteria

The competitiveness index of the four main factors is calculated based on the mean of the sub-factors index, the overall competitiveness index is calculated based on the mean of the four main factors' index.

Based on the four main factor's index and overall index, we then rank the provinces, the one that has a maximum value of index calculated as 100 scores, other provinces' scores are calculated according to their values.

The overall scoreboard shows the province's context of competitiveness compared to the other provinces. Those provinces ranked top should not be directly considered as the most competitive. Although it is right to consider that those provinces are more competitive than other provinces.

HOW TO USE THE PROVINCIAL COMPETITIVENESS REPORT?

Provincial competitiveness scoreboard is divided into the following sections:

1. Provincial Competitiveness Scoreboard (pages 21-30)

The provincial competitiveness scoreboard presents the overall rankings for the 21 provinces. The provinces are ranked from the most competitive to the least competitive.

Competitiveness Factor Rankings

In addition to the overall competitiveness scoreboard, provinces are ranked according to each of the four main factors: Economic Performance, Government Efficiency, Business Efficiency and Infrastructure.

Competitiveness Sub-Factor Rankings

Provinces are ranked according to all 16 sub-factors (4 from each factor). The sub-factor rankings provide more detailed and in-depth examination on each of the competitiveness factor rankings.

Competitiveness Structures

This section compares the values of the four competitiveness factors for each of the 21 provinces. Charts help identify in which factors a province may have a particular strength or a weakness.

2. Provincial Competitiveness Profiles (pages 31-115)

This section provides a summary of the overall competitiveness, competitiveness structure, sub-factor rankings and challenges facing each province's development.

Moreover, 10 strengths and 10 weaknesses by four competitiveness factors (Economic Performance, Government Efficiency, Business Efficiency and Infrastructure) are highlighted. It is important to determine competitiveness strengths and weaknesses as they play a vital role in the current provincial economic situation and future development perspectives. By properly examining its competitiveness strengths and advantages, the province can identify its comparative advantages. In addition to identifying strengths, addressing its weaknesses would help improve that province's competitiveness.

In addition to comparing competitiveness of different provinces, this report also provides 25 improvements and 25 decreases in comparisons of last and this year's indicators for each of the provinces.

3. Statistical Tables (pages 117-175)

This section presents the complete criteria list, broken down by competitiveness factor. It is possible to find rankings and information about each of the 150 ranked criteria affecting competitiveness.



PROVINCIAL COMPETITIVENESS SCOREBOARD

Competitiveness factors

