Statistical units of production in the Russian national accounts

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Introduction.
The role of statistical units of production in the Russian national accounts

- Production approach is the primary method of GDP calculation.
- Importance of regional macroeconomic indicators, their harmonization with the national indicators.
- Growing demand for indicators of productivity/efficiency, based on gross value added, both for the national and regional level.
Introduction.
Two types of statistical units

- Reflection of the economic transactions related to the distribution and redistribution of income and asset:
  - institutional units having rights of ownership for assets and products.

- Reflection of production of goods and generation of primary incomes:
  - maximum localisation and homogeneity of production.
1.1. Industries. 
Sources of data

- In Russia data derived from existing tax and accounting reporting are mainly tied to the institutional unit.
- It is necessary to carry out expensive statistical surveys to obtain data on homogeneous production units:
  - overall annual survey of all non-financial large and medium corporations (production and factor costs by detached subdivisions, by economic activity);
  - overall annual survey of all non-financial large and medium corporations (fixed capital by detached subdivisions);
  - set of monthly surveys of all non-financial large and medium corporations (production, labour, investment, etc.)
### 1.2. Industries. Homogeneity

The share of the principal activity in the output\(^1\), \(^2\), 2014

<table>
<thead>
<tr>
<th>RNCEA section</th>
<th>Share of the principal activity, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Mining and quarrying</td>
<td>90,8</td>
</tr>
<tr>
<td>D. Manufacturing</td>
<td>90,8</td>
</tr>
<tr>
<td>E. Electricity, gas and water supply</td>
<td>96,1</td>
</tr>
<tr>
<td>F. Construction</td>
<td>94,9</td>
</tr>
<tr>
<td>G. Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods</td>
<td>79,3</td>
</tr>
<tr>
<td>H. Hotels and restaurants</td>
<td>93,8</td>
</tr>
<tr>
<td>I. Transport, storage and communication</td>
<td>97,2</td>
</tr>
</tbody>
</table>

\(^1\) Non-financial corporations sector, large and medium-sized enterprises.  
\(^2\) On the basis of institutional units.
Industry structure of the gross value added can be distorted even at the national level:

- output of secondary activity making up a significant share of total output is added to the output of principle activity;
- in enterprises or enterprise groups with vertically integrated production structure the share of mining and quarrying is often underestimated (sensitive for countries whose economies are dependent on natural resources);
- transfer prices amplify this effect even in case when all flows of products are considered.

On the regional level gross value added may be distorted not only in its structure but in its absolute value.
2.1. Regional indicators. Demand

- Gross regional product (GRP) is a key macroeconomic measure of regional economy:
  - sum of gross value added at basic prices created within the territory of a region with the exception of collective services provided by public sector units, and financial intermediation services.
- GRP is calculated with the production approach.
- For each region of the Russian Federation two SNA accounts are compiled by industry:
  - the production account,
  - the generation of income account.
- Industry data of these accounts is used by the government bodies and business.
The major difficulty in evaluation the gross value added at regional level is treatment of multi-regional enterprises with vertically integrated production structure:

- data presented by the current micro-accounting reporting do not allow to evaluate properly well the output and production costs for each of the production units included in this kind of corporation;
- currently necessary data is obtained from the overall annual structural survey (see 1.1 above), but a special survey for complex multi-regional enterprises is planned to introduce;
- evaluation of value added for local units of these corporations is currently quite conditional.

Imputation of market prices instead of transfer prices can significantly alter the distribution of produced value added between economic sectors and regions. This procedure is still not completely implemented in the compilation practice.
3.1. Further development. 
Units of production in Russia

- In the European Union the enterprise is "the smallest combination of legal units that is an organizational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources."\textsuperscript{(3)} Both legal entities and physical persons are considered as legal units.\textsuperscript{(4)}

- This definition of the enterprise covers all kinds of enterprises including unincorporated enterprises of households, which may be considered either as quasi-corporations, or enterprises which assets can’t be separated from the household-owner of the enterprise (individuals acting on their own right).

- In Russia according to the statistical business register the total number of registered legal entities accounts approximately for 4.7 million entities. Also approximately 3.5 million of households are involved in the production as individual entrepreneurs. Thus, the number of legal units (according to Eurostat terminology) exceeds 8 million.

\textsuperscript{3) Council Regulation (EEC) No. 696/93, Section III.}
\textsuperscript{4) Council Regulation (EEC) No. 696/93, Section II.}
3.2. Further development.
Units of production in Russia

- Despite of great total number of reporting units there is a relatively small number of large and medium-sized enterprises within which local units (and establishments) can be allocated:
  - in the sector of non-financial corporations 9% of 360 thousand large and medium-sized enterprises consist of more than one local unit;
  - 2.5% of the these enterprises have local units located in other regions of the country;
  - the total number of local units, including all single-unit large and medium enterprises of non-financial corporations sector is 575 thousand (small businesses and individual entrepreneurs are considered as local units conventionally at the current stage of development).
Transition to local unit as a statistical unit of production will foster reconciliation of regional and national macroeconomic data, especially industry estimates of gross value added.

The existing benchmark data generation system in Rosstat in case of production account is mostly based on statistical surveys which make it possible, after introduction of some extensions, compose production data-base by local units.

At present stage necessary dataset linked to local units is partly formed directly from statistical observation and partly calculated.

This approach can be regarded as an intermediate on the way to compilation of production indicators by industry on the basis of establishments (local kind of activity units).
Thank you!