Influence of the exhibition industry in Poland on the economy

At the request of Polish Chamber of Exhibition Industry (PCEI), *Centrum Ekspertyz Gospodarczych* (Economic Research Center) at Poznań University of Economics (CEG FAE) prepared a study of the influence of the exhibition industry in Poland on the economy. The main objective of the study was an attempt at quantifying the overall influence of the exhibition industry in Poland through the presentation of results of operations of various players active on the exhibition market.

Neither commonly accessible statistics nor other available sources which characterize the aforementioned entities allowed for achieving such a broad objective successfully. Therefore the authors of the study made an effort to generate primary sources through a wide range of empirical research of the representatives of almost all entities which comprise the sector of the exhibition industry in Poland. Secondary sources, which were very difficult to obtain due to the unwillingness of enterprises to disclose even the basic parameters characterizing their operations, supplemented the conducted analysis. As a consequence, the study had an empirical character since it was largely based on the results of primary research.

The empirical and research work commenced in the first quarter of 2009, so almost half a year before the onset of the first troubling symptoms of the global economic meltdown.[1] Empirical research was concluded at the beginning of July and PCEI received the completed study collected in three volumes in September.

The concept of the study, which assumed the use of quantification formula of the influence of trade fairs and exhibitions on the economy, included the identification of the problem in the context of the whole exhibition industry (trade fair cities) in Poland, as well as the fullest possible range of this influence. Due to the necessity of limiting the range of identification, especially in the context availability of primary empirical material, to several representatives, the members of PCEI selected five trade fairs cities (Kielce, Kraków, Łódź, Poznań and Warsaw) which account for 85-90% of the exhibition potential in Poland.

The identification and attempt to measure the influence of the exhibition industry in Poland on the economy required conducting research among several groups of entities which represent both the supply and the demand side of the exhibition market, and therefore the research was conducted among the following:

- trade fair companies (organizers),
- trade fair service providers,
- exhibitors,
- visitors,
- hotels as representatives businesses indirectly related to trade fairs and exhibitions,
- business-related institutions, i.e. local government bodies,
- presidents of trade fairs cities as reliable representatives of local governments.

The selected representatives of the entities mentioned above received individually tailored, separate, although compatible in some aspects, research instruments in the form of questionnaire surveys.

As a result, extensive research material was accumulated, which formed the foundation to formulate generalized results for the whole exhibition industry and, in this way, allowed for certain conclusions on the value to trade fairs and exhibitions in the Polish economy.

Taking into consideration the key importance of the entities on the side of the demand, which generate the impulse critical for the scale of operations of trade fair companies, trade fair

---

[1] The analysis of the impact of the crisis on the exhibition industry (years 2007-2008) as well as projected changes in the situation of entities comprising the exhibition sector for 2009-2010, was the subject of a separate study.

service providers and, indirectly, of other businesses indirectly related to trade fairs and exhibitions, particular attention was paid to the research of exhibitors and visitors.

It total, 846 interviews with exhibitors and 1603 interviews with visitors (both representatives of businesses and individuals) were conducted.

The assessment of representativeness in the research of exhibitors was conducted by measuring the conformity of the parameters of the sample and the population in the category 'exhibition stand area'. The representativeness of the sample was assessed on three research levels. As a result of the above, the research was found representative. The interviews conducted among visitors had the character of a survey.

Having obtained information from the research sample on the level and values of certain phenomena, it was possible, through the use of proper rules, to 'transfer' the information on the whole population.

Results

The main objective of the study defining various spheres of influences of the exhibition industry in Poland on the economy was an attempt to define quantitative and qualitative effects on the financial turnover, the state budget and local development of trade fair metropolises.

In order to comprehensively present this influence, two streams were differentiated: the stream of expenditure and the stream of taxes. Additionally, qualitative effects were pointed out, which were especially useful to calculate the value of investments related to the exhibition industry (Chart 2).

The first stream of quantitative effects concerned the expenditure of exhibitors and visitors and its presentation was the starting point for calculating financial streams borne by both main representatives of the demand side of the exhibition industry.

The expenditure of exhibitors was divided into two categories. The first were consumer expenditure understood as resources spent on various types of services related to the participation in trade fairs and exhibitions and the stay at the trade fair city, excluding those directly connected with the preparation and organization of the exhibition stand. The expenditure includes the following items:

a. expenditure on travel,
b. expenditure on parking services,
c. expenditure on taxis,
d. expenditure on accommodation,
e. private expenditure on catering,
f. private expenditure on shopping,
g. expenditure on cultural events,
h. expenditure on entertainment,
i. expenditure on sports and recreation.

The validation of such analysis of expenditure is the fact that it directly covers personal expenditure borne by representatives of companies – exhibitors, which is related to various types of services which accompany the stay in an exhibition center. At the same time, the scale of the expenditure is completely different in comparison to 'industrial' expenditure which comprises the cost of rent as well as the preparation and organization of the exhibition stand. Such expenditure includes above all:

a. expenditure on additional transport (forwarding) – excluding the cost of transport and forwarding paid to trade fair service providers,

b. expenditure on additional staff employed during the exhibition,

c. total expenditure on trade fair service providers (design, construction, furnishing of the stand as well as transport and forwarding),

d. expenditure on promotion and marketing which include 'company' expenditure on food, i.e. cost of banquets, dinners or catering at the stand,

f. expenditure on the rent of the exhibition stand.

The **leading position in the hierarchy of expenditure**, which was defined as **consumer** expenditure, was **expenditure on accommodation (28.0%)**.

The **second position** was **expenditure on entertainment (19.1%)**, **followed** by **private expenditure on shopping (16.3%)**, **travel (13.6%)** and **catering covered privately**, excluding company expenditure on catering **(9.7%)**.

A small percentage of trade fair budgets is spent on **parking services (5.8%)**. Even less is spent by companies – exhibitors on **taxis (4.9%)**.

Two marginal positions in the total of consumer expenditure are **expenditure on cultural events (1.3%)** and **sports and recreation (1.2%)**.

Apart from typical expenditure related to traveling to the exhibition center, accommodation, catering and entertainment, etc. companies which participate in trade fairs or exhibitions allocate certain **financial resources to the rent and preparation of the exhibition stand**, i.e. its design, construction and furnishing (Drawing 1).

When estimating the **cost of rent of the exhibition space** (rent of the exhibition stand), it may be observed that **it accounts for** as much as **55% of the total sum of the expenditure in question**.

The **second** key **position** in this category of expenditure is occupied by the **costs related to the services rendered by trade fair service providers (32.0%)**.

In the context of expenditure on rent of the exhibition stand and trade fair service providers, two other categories of expenditure must be taken into consideration, namely **expenditure on additional transport** (excluding transport and forwarding provided by trade fair service providers) and **expenditure on promotion and marketing**, which include 'company' expenditure on catering, i.e. cost of banquets, dinners or catering at the stand. The above categories of expenditure account for **6.4% and 5.0% accordingly** of the total expenditure.

A marginal position in the exhibition budget of companies which participate in trade fairs and exhibitions is the **cost of additional employment** of hostesses, interpreters, technical specialists and security **during the event (1.5%)**.

The **expenditure of visitors** related to the participation in trade fairs and exhibitors are as follows:

a. cost of travel

b. cost of accommodation,

c. expenditure on catering,

d. expenditure on services connected with trade, culture, entertainment, sports and recreation.

The analysis of share of individual types of expenditure in the context of the total expenditure allocated to the participation in trade fairs and exhibitions and the stay at the exhibition center showed that the two main positions are the **cost of accommodation** and the **cost of travel** (**26.7%** and **15.5%** accordingly).

Expenditure on entertainment, cultural events, sports, recreation and shopping accounts for **21.8%** of the total sum of expenditure borne by visitors.

A major position in the expenditure structure is occupied by resources allocated to **catering (18.7%)**.

Two marginal positions in the total sum of expenditure borne by visitors are **expenditure on taxis (3.8%)** and **parking services (3.5%)**.

Similarities of the structures of expenditure related to participation in trade fairs and exhibitions of both exhibitors and exhibitors, despite major differences in the volume of the expenditure as well as the expenditure on the exhibition stand, which is characteristic only for exhibitors, allowed for the aggregation of the values of individual components and presentation of the total values, i.e. the expenditure of both exhibitors and visitors.

Drawing 2 shows that in the category of consumer services, **aggregated expenditure** on shopping, entertainment, cultural events, sports and recreation is the largest chunk of the exhibition budget of exhibitors and it accounts for almost 40% of the total sum of expenditure on consumer services. The second largest, this time uniform, category of expenditure – the expenditure on accommodation – accounts for 18% of the exhibition budget, and the expenditure on transport – on the third position – accounts for 13.6% of the total sum of consumer expenditure. Other types of expenditure have relatively lower importance and they are: private expenditure on catering, excluding 'company' expenditure on catering – 9.7%, expenditure on parking services – 5.8%, and expenditure on taxis – 4.9%.

The structure of expenditure borne by visitors is slightly different. The visitor's wallet is burdened almost equally by three types of expenditure, i.e. cost of accommodation (26.8%), travel (25.5%) and aggregated expenditure on shopping, entertainment, cultural events, sports and recreation (21.8%). Expenditure on catering, which has relatively small importance in the case of exhibitors, had the fourth position in the structure of expenditure borne by visitors (18.7%).

When aggregating expenditure borne by both groups of participants in trade fairs and exhibitions separately for each type of services provided, it turns out that in the case of expenditure on shopping, entertainment, cultural events, sports and entertainment (calculated as one category), almost 70% of the amount obtained is expenditure borne by exhibitors. In comparison with visitors, exhibitors also spend more on taxis and parking services, however, it must be remembered that both those services are clearly the least important positions in the budgets of exhibitors and exhibitors alike.

The starting point for the **quantification of the influence of the exhibition industry on the economy** was the analysis of unit expenditure borne by an 'average' exhibitor and visitor related to participation in trade fairs and exhibitions and the stay in the trade fair city.

The estimation of the value of expenditure borne by exhibitors and visitors was made, taking into consideration two criteria simultaneously: the criterion of time and the criterion of space. Additionally, a procedure of valuation of obtained results was used, based on a 'corrective coefficient' set on the basis of two variables, i.e. the number of exhibitors and the area of the exhibition stand (calculated together).

The analysis of the data shows that **estimated expenditure of all exhibitors and visitors** which participate in trade fairs organized by companies which are members of PCEI amounted to **nearly PLN 1bn**, 53% of which was the expenditure of exhibitors.

<u>The second stream of quantitative effects</u> concerned taxes generated by the most important enterprises which represent the supply side of the exhibition industry, i.e. trade fair companies and, closely related to them, trade fair service providers, as well as hotels which were the only empirically researched representatives of businesses indirectly related to trade fairs and exhibitions.

The exhibition industry which consists of a number of business enterprises (like trade fair organizers, trade fair service providers and other indirectly related businesses) and people employed by them, implies advantages both for the state budget and the budgets of trade fair cities. For the purpose of this study, an attempt was made to evaluate advantages for the state budget resulting from the corporate income tax (CIT) and the personal income tax (PIT).

The quantitative effects of tax stream (CIT and PIT) were defined for three most important groups of enterprises which form the exhibition industry in Poland, namely for trade fair companies, trade fair service providers and representatives of businesses indirectly related to trade fairs and exhibitions. For the purpose of this analysis, due to the crucial role of hotels in the exhibition market, they are the only representative of businesses indirectly related to trade fairs and exhibitions which was surveyed. The justification for such an approach may be the results of survey conducted among exhibitors and visitors, whose expenditure on accommodation exceeded 25% of all consumer expenditure borne in relation to participation in trade fairs and exhibitions.

The base of the analysis of the influence of activities of trade fair companies on the economy were the primary sources, i.e. financial reports of selected trade fair organizers and the results of the questionnaire survey conducted among representatives of those enterprises.

And thus, it is estimated that the **corporate income tax paid by trade fairs companies** which are members of PCEI reaches on average **PLN 10.3m** per annum while the **personal income tax** is estimated at **PLN 4.0m** per annum.

Similarly, it is estimated that **trade fair service providers** pay Polish tax authorities approximately **PLN 5.9m** of **corporate income tax** per year and **PLN 5.9m** of **personal income tax**.

The research shows that hotels, in relation to the income from the rent of rooms by trade fair participants, each year pay an average amount of **PLN 1.2m** of **corporate income tax** and approximately **PLN 1.6m** of **personal income tax**.

The estimated **revenue to the state budget from income taxes** amounts to **almost PLN 30m** per year, 59% of which is the revenue from corporate income tax.

Taking into consideration the corrective coefficient to estimate the budget revenue from other businesses indirectly related to trade fair and exhibitions (excluding hotels), **it is estimated that it amounts to approximately PLN 2.4 – 3.6m (CIT) and PLN 3.2 – 4.8m (PIT) per annum**. However, it must be noted that due to the lack of clear empirical data, these are estimates only.

Supplementing the quantitative results with the estimated expenditure and taxes of enterprises outside PCEI.

The conducted quantitative analysis was based on a questionnaire survey among the most important players of the exhibition industry. However, it must be remembered that the research was conducted only on trade fairs organized by the members of Polish Chamber of Exhibition Industry, hence the results concern only the market which is being monitored by PCEI. Despite the fact that it is a major part of the whole exhibition market in Poland, in order to get the full picture of the influence of trade fairs and exhibitions in Poland on the economy, other enterprises, which operate outside PCEI, must not be omitted.

For the purpose of this study, at attempt was made to evaluate the market outside the scrutiny of PCEI. Due to the lack of sufficient data on all trade fair companies in Poland, both in terms of their number and the scope of their activities reflected in sales revenue, rented exhibition space, the number of exhibitors and visitors, for the purpose of this study, approximate data on trade fairs organizers which are not members of PCEI was used, courtesy of PCEI.

In order to estimate the market share, four most important parameters were used which describe trade fair activities:

- total rented exhibitions space in m^2,
- number of exhibitors,
- number of visitors,
- number of trade fairs and exhibitions organized,

and for those parameters appropriate values were used. Each of the above parameters was calculated on the basis the data gathered and verified by PCEI.

Following certain detailed assumptions, it was estimated that **Polish Chamber of Exhibition Industry monitors approximately 66% of the exhibition industry in Poland**.

It follows that in order to quantify the influence of the whole exhibition industry in Poland, all the gathered results (concerning both expenditure and taxes) should by multiplied by the indicator **1.52** (= 100/66).

<u>The study of qualitative effects</u> was based the questionnaire survey addressed to the presidents of five analyzed cities, the presidents of two national self-government organizations – Polish Chamber of Commerce and Business Center Club – and presidents of Regional Chambers and chancellors of Regional Lodges of these organizations in the five analyzed cities.

In the conducted study of qualitative effects, despite several differences, most of the questions were similar which allowed for finding similarities/differences in the opinions and evaluations made by these representative and reliable respondents.

Thematic subtopics, which together formed the scope of evaluation of qualitative effects of the influence of trade fairs and exhibitions on the local economy, were differentiated for the stream of qualitative effects (Drawing 2 – QUALITATIVE EFFECTS).

The evaluation of selected effects was based mostly on the evaluation of the quality level by the respondents on the scale from 1 to 5.

Drawings 3 to 7 show the evaluation of:

- **public infrastructure** including: streets, parking lots, public toilets, street lighting, parks, pedestrian routes and bicycle lanes,

- **commercial infrastructure** including: hotels, catering, shopping malls, cultural and entertainment centers, sports and recreation facilities,

- **public services** including: local transport, cultural, sports and recreational events, tourist information as well as aesthetic qualities, cleanliness and safety of the city,

- **attributes of the city**, like the atmosphere, hospitality, friendly attitudes of inhabitants, the image of the city.

The analysis of the gathered evaluations of the **public infrastructure** revealed that the average grade ranged from 3.0 to 4.8 except evaluations of representatives of the local government in Warsaw.

Generally speaking a slightly different evaluation was observed for public infrastructure by city authorities and by business organizations.

The differences in the evaluations made by those two groups are minimal with reference to the evaluation of influence of trade fairs on the commercial infrastructure.

The evaluations are also pretty similar in all analyzed cities and they range from 3.7 to 4.9.

A similar range is observed in the evaluation of influence of trade fair and exhibitions on the **level of public services**.

The highest evaluation in the opinion of the respondents was given to the connection between trade fairs and the attributes of the city (atmosphere, image, etc.)

The respondents also evaluated other fields of activities, such as promotion of trade fairs and exhibitions and influence of trade fairs on the development of the social sphere.

Activities of cities related to promotion of trade fair and exhibitions were evaluated at quite a low level (on the scale from 1 to 5), from 1.7 in Warsaw to 2.9 in Kraków and Poznań.

The level of influence of trade fairs and exhibitions on the development of **education, culture, arts, urban planning and architecture** as well as **cities as metropolises** was presented in Drawing 7.

The influence of trade fairs and exhibitions on social development of the cities is the most spectacular in the perception of the city as a metropolis (grades above 3.8).

Also high evaluation was given to culture and arts (grades ranging from 2.9 to 3.5) and architecture (grades ranging from 2.4 to 4.2).

The lowest evaluation, in the opinion of the respondents, was given to the connection of trade fairs and exhibitions with education (grades from 2.1 to 3.7).

While identifying qualitative effects concerning **investments which condition the development of the trade fair function** of the analyzed cities and certain, **completed and planned investments in the infrastructure**, it was possible to estimate the costs of the planned project.

These sums may be added to the financial stream generated by the exhibition industry with the reservation that only a certain percentage of these investments should be connected to the functioning of trade fairs and exhibitions.

Those investments include:

- investments of the exhibition sector (whose value was estimated at the level of approximately PLN 70.3m),
- investments indirectly related to trade fairs (approximately PLN 166.0m)
- investments in technical infrastructure of trade fair cities (approximately PLN 126.5m)

As a result, the stream of expenditure and taxes should be supplemented with the amount of **PLN 362.8m** which is the result of the value of investment outlays.

Jerzy Kuczyński PhD
President of *Centrum Ekspertyz Gospodarczych*
at Poznan University of Economics

Bogusław Zalewski
President of Polish Chamber of Exhibition Industry

Summary

1. Stream of quantitative effects from expenditure borne by exhibitors and visitors PLN 953.4m
2. Stream of quantitative effects from taxes

CIT	PLN 17.4m
PIT	PLN 11.5m

3. Estimated quantitative effects from expenditure and taxes borne by enterprises which are not members of PCEI PLN 510.8m
4. Value of investment outlays related to trade fairs and exhibitions PLN 362.8m

Not aggregating the above sums due to the various scope and level of accuracy of the calculations and estimations, we are able to arrive at the ballpark figure showing the **range of quantitative effects of trade fairs and exhibitions on the economy at the level of**:

PLN 1.8-2bn

It should be stressed that due to the impossibility of evaluating the tendency to consume (to save) presented by enterprises which gain profits, it was impossible to analyze the multiplier effect created thanks to the operations of the exhibition sector.

It may be assumed that with the relatively high share of consumer expenditure of the population in individual income, **the value of this multiplier may range from 3.0 to 5.0**.

Let us compare the above level of quantitative effects of trade fairs and exhibitions on the economy to other economic indexes for Poland.

For example:

- value of the construction sector in GDP in 2007 amounted to PLN 67.2bn
- revenue of Poland from incoming tourism (the so-called invisible export) in 2007-2008 amounted to approximately PLN 10bn per annum
- revenue to the budget of the city of Łódź in 2008 amounted to over PLN 2.5bn and revenue to the budget of the city of Poznań amounted to almost PLN 2.4bn
- expenditure of the state budget on culture and preservation of cultural heritage for 2009 are planned at the level of PLN 1.601bn, and for education at the level of PLN 1.472bn