

**EDWARD STAWASZ\*, PAWEŁ GŁODEK\*\***

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**SMEs innovation and job creation potential in the shadow economy context**

**Abstract**

*The presented paper treats about the ability of creating new jobs by innovative SMEs in Poland in the age of a deep transformation of the Polish economy. The authors try to verify the concept of B. A. Kirchoff about the relationship between innovation and enterprise growth. Some sector and market conditions of functioning of innovative SMEs are also analyzed in the paper. A study among 81 Polish SMEs from Lodz region confirms that there is an independence between enterprise innovation and its ability to create jobs. On one side, among analyzed enterprises about 14% was highly innovative fast growing. On the other side, low innovative and slowly growing made a high percentage. The research pointed an important factor of the ability of job creation – sector and market conditions, management problems (lack of experience, problems with gathering the initial capital) and poor public support. The shadow economy has a positive impact on growth rather than on innovation. However, it does not have a positive influence on expansion, innovation and new jobs creation undertaken simultaneously, which is the most desirable activities of the enterprise.*

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\* Ph. D., Professor, University of Łódź

\*\* Ph. D., University of Łódź

## 1. Introduction

One of the most important functions small and medium-sized enterprises (SMEs) perform in economy is their ability to create new jobs. Conditions of SME growth became one of the focal interests of both researchers and the government's policy aimed to support this sector. Innovativeness is at the forefront of SME-oriented issues which may be associated to SMEs growth.

## 2. Innovativeness and SME growth

According to Schumpeter, an entrepreneur is an innovator who owing to innovations generates revenues and creates new jobs. He acknowledged that such a role belongs to large firms due to resources and possibilities they possess. The role of SMEs in the process of Schumpeterian "creative destruction" was presented by Kirchhoff (1994). From his perspective entrepreneurship and innovation do not necessarily have to go hand in hand as Schumpeter argued. This is because there is plenty of innovations that are not used successfully by entrepreneurs, and at the same time there are many entrepreneurial activities carried out without constant exploitation of innovation. "Creative destruction" can also be made by SMEs as evidenced by a growing share of SMEs in creation of new jobs and inventions as well in generation of production, revenues and exports (Schreyer, 2000; Technology, Productivity and Job Creation, 1998; Calom, 1994). Kirchhoff distinguishes two dimensions in his analysis: SME innovativeness and the rate of their growth (employment) and argues that both dimensions are independent of each other which means firms characterized by varied rates of employment growth (from a low to a high rate) and by degrees of innovativeness (from low to high innovative) can exist independently. This independence does not mean that innovativeness of firms guarantee a growth in employment, neither does it mean poorly innovative firms can be fast growing firms that contribute to a considerable growth of employment. Storey (1994) stated that on closer examination, there is considerable variation in the employment generating activities of small innovative firms and, as has been noted for the small firm sector generally. And the large share of new jobs are likely to have been created by only a small sub-set of the total population.

An independence of SME innovativeness and the rate of employment growth can result from the fact that they are under influence of various factors. The rate of employment growth can be determined by such factors as personal aims of firms' owners, resources in possession (competences, financial means etc.) and a market acceptance for innovation. The innovativeness of firms is

determined by same factors. However, to a certain extent they are controlled more by entrepreneurs who can specify aims (e.g. proinnovative ones) and make inventions and ideas that lay the foundations for innovation independently.

Given the market and resource restrictions, entrepreneurs may be incapable to attain an intended degree of innovativeness. However, an entrepreneur who keeps producing new inventions and attempts to be innovative presents himself as a different entrepreneur as the one who starts an economic activity with one innovation and makes little effort to enhance innovations possessed by the firm (Sheikh, Oberholzner, 2001). The SME sector is not at all homogenous, on the contrary – it constitutes a set of varied units, with respect to both their economic dynamics and their degree of innovativeness, and the role they play in economy. Depending on the innovative dynamics and the rate of growth very different types of firms can be distinguished (see Table 1). The following types were differentiated: (1) economic core, (2) ambitious, (3) constrained growth and (4) glamorous.

**Table 1. Typology of SMEs from the viewpoint of innovativeness and the firm's growth rate**

|                                    |             |  |                                    |
|------------------------------------|-------------|--|------------------------------------|
| <b>Innovativeness<br/>of firms</b> | <b>High</b> | <b>Type III</b><br><b>CONSTRAINED GROWTH</b> | <b>Type IV</b><br><b>GLAMOROUS</b> |
|                                    | <b>Low</b>  | <b>ECONOMIC CORE</b><br><b>Type I</b>        | <b>AMBITIOUS</b><br><b>Type II</b> |
|                                    |             | <b>Low</b>                                   | <b>High</b>                        |
|                                    |             | <b>Firm's growth rate</b>                    |                                    |

Source: Kirchoff B. A. (1994) *Entrepreneurship and Dynamic Capitalism. The Economics of Business Firm Formation and Growth*, PRAGER, Wesport, London.

Whereas the views expressed in the topical literature basically agree as to the positive correlation between innovativeness of firms and an increase in turnover, the results of studies carried out in relation to an employment growth bring a mixed outcome. Tether and Massini (1998), Sheikh and Oberholzner (2001) point to a considerable positive impact of innovations (especially product innovations) on the growth of employment in the firm. On the other hand, Kalantaridis and Heby (1999) argue that on the micro level there is no justification to link innovative activity and the growth of employment. Although it is difficult to identify the reasons for differences in the results of individual

studies, the most significant are variations in used definitions, and in particular in the operationalisation of the notion of innovativeness.

Analyses also refer to selected groups of an SME sector. Holzl (2009) analyzed the problem among fast-growing SMEs. He used a numerous sample of enterprises from 16 EU countries between 1998 and 2000. He finds that innovation in the form of R&D and turnover share coming from products new to the market is more important for the growth (measured on the basis of an employment level) of fast-growing SMEs. In this case innovation can be seen as a high-risk and high-gain strategy: if successful, innovation might provide a growth premium, but it is also very likely that the innovation turns out to be a failure and even a drag on the growth rate of most firms. Freel (2000) points to the fact that in the sample of firms that he analyzed innovative firms showed a growth in employment with the same frequency as non-innovative firms did. At the same time the size of their growth rate was considerably higher than it was the case for non-innovative firms.

Stam and Wennberg (2009) analyzed firms in the initial phase of their operations. They argue that the innovativeness of start-ups measured by an R&D intensity, despite a positive influence on such factors as increasing interfirm alliances or new product development activity, does not show a significant correlation with an increase in employment.

### **3. The shadow economy and SMEs**

The shadow economy is defined in an economic context as running an activity that is not prohibited by its nature, however it is carried out in an undisclosed manner (Schneider, Enste, 2000). It may include a number of activities related to the failure to declare part of legitimate business income to the tax authorities, employing workers with no appropriate contracts or the use/provision of informal sources of financing. Thus, it is markedly different from criminal activity or other prohibited activities (Głodek, 2008). The reasons for non-disclosure vary, however the existence of the shadow economy as described above has both positive and negative consequences for the entities involved (Williams, 2007).

The share of the shadow economy in Polish economy is significant and it stabilized in recent years. According to estimates, its level amounts to 15-17% of GDP. The biggest impact on the size of the shadow economy has an economic activity run mainly in the domain of trade, construction as well as real estate services and services to the firms (Central Statistical Office, 2007).

For entities running their operations in the shadow economy, mainly from the SME sector, the main benefit is a possibility to avoid taxes and other obligations imposed by the state through the existing law regulations (Beloled, 2005; Djankow, Liberman, Mukherjee, Nenova, 2002). These benefits can be expressed in the directly visible cash form as lower taxes and payments, but also as time savings in handling all business formalities. Under certain circumstances the existence of the shadow economy makes it possible to gain market experience and use entrepreneurial opportunities in an effective way (Williams et al, 2009; Stawasz, 2008).

It can be assumed that the use of some elements of the shadow economy may exert its influence on the firm's innovativeness and the growth potential in many different ways. Potentially favourable factors include an increased profitability of the firm which facilitates an accumulation of own capital that finances investment outlays. However, declaring lower profits will negatively influence the possibilities to acquire external financing and to use accumulated capital to run investment activity (a problem of disclosure of the sources of financing). In addition, an increase in the scale of activity may influence in different ways the possibility to use the shadow economy instruments through the firm's greater visibility on the market and a higher number of employees who have knowledge of shadow-economy operations (the risk of disclosure). On the other hand, a withdrawal from the use of shadow-economy instruments will mean an actually higher level of taxation and lower profits for the firm.

As the financial surplus from the shadow-economy operations may go towards both consumption of the household and investment processes of the entrepreneur, there is a clear motivation to use the first option and allocate the profits gained from the shadow-economy activities for household consumption while retaining the present level of profitability. It can be also assumed that shadow-economy activity affects negatively the openness of the firm to contacts with new external partners, confidence and other social elements essential from the viewpoint of processes of innovation generation (e.g. a failure to respect copyright law).

#### **4. The sample**

The authors used a database consisting of 81 SMEs from the Lodz region being the average size in Poland and typical for the Polish economy. The survey was carried out by means of direct questionnaire interviews. The arithmetic mean of surveyed firms was 13 years in 2007. Almost 80% of firms can be labelled as mature (more than 5 years in operation). Considering the age of the

firms and their experience the above data allow to treat the responses as representative for the SME sector and mature firms. More than 90% of them were established after the period of deep political and economic transition in Poland, sometimes labelled as the period of an “entrepreneurship boom” or “market self-regulation of entrepreneurship”. Almost 15% of the firms were established in the years 1999-2003, that is in the period when economy was overcoming the crisis and implementing the solid foundations for political and economic transition, just before Poland’s accession to the European Union. These firms can be described as relatively unstable and „immature”. Every tenth firm that was established prior to 1989 before economic reforms were introduced. These characteristics are similar to the age structure of the SME sector in Poland. In the group of the oldest firms established before 1989 the average number of employees was 36, whereas in the group of firms established between 1990 and 2001 it reached more than 48. In the group of the youngest firms (established between 2002 and 2006) the average number of employees amounted to 46. This shows a weak correlation between the age of the firms and the size of employment in the group of the surveyed firms.

Micro firms with up to 9 employees prevailed in the sample and amounted to 59.3% of the total number of firms. Small enterprises employing between 10 and 49 persons constituted 25.9% of the total number whereas the share of medium-sized firms with an employment level between 50 and 249 was 14.8%. The average size of employment was 23 employees and the median (a typical firm) was 7 employees. The surveyed firms vary significantly with respect to the size of activity – they belong to 38 sections of the Polish Classification of Economic Activities. The highest number of firms run manufacturing and trading activities (32.1% each). More than half of the manufacturing firms are located in big agglomerations. Then, 60% of trading firms come from small towns. All IT firms are located in big agglomerations. The surveyed firms sell most of their products on local or regional markets – 81.5% of firms generate 66% of total turnover. 54.3% of firms operate on the domestic market producing 28.6% of their turnover there. Although 19.1% of enterprises operate on foreign markets, the share of exports in the total volume of sales is small and it does not exceed 6%. In the latter case this mainly concerns manufacturing firms and medium-sized firms (with more than 50 employees).

## 5. The results of the survey

### 5.1. The innovativeness of the firms

The firms that introduced at least one product or process modification within the period of the last three years were considered as innovative. The surveyed firms are characterized by high innovative activity. Almost 90% of the firm introduced some changes in their products, technologies or methods between 2004 and 2006. The sample is diversified in terms of innovativeness measured by a degree of novelty of innovative changes that were introduced. Generally, most changes is new only to the firm (74.7% of the firms). 21.5% of the firms introduced changes new to the domestic market, whereas a small 3.8% of the firms introduced changes new to the world, which is about 7 times less than in the case of the domestic market. The highest number of innovative changes took place in the area of the firm's product assortment - 60% of the firms. Quite high was also an index of changes of the marketing nature (40% of the firms) and changes in the domain of technology (35.8% of the firms). Modifications in the field of management and organization were indicated by 22.2% of the firms. Thus, changes of "hard" nature, i.e. taking place in products and technologies, predominate. A separate case is an implementation of new patents, licenses or *know-how*. These changes constitute a real novelty. However, such changes were quite few and only from 5.1% to 10.1% of the firms reported on them. However, it seems that this reflects better a real picture of the innovativeness of the surveyed enterprises than a merely declared degree of changes in innovation.

As a measure of the firm's innovativeness, a share of turnover generated from the sales of new or modified products or services that were introduced within the previous three years in the total turnover of the firm in 2007 was used in this article. The average value of this index for the analyzed group amounted to 30%, whereas the median was 20.0%. However, the range of the index presenting the share of sales in new or modified products or services that were introduced in the years 2004-2006 in the total turnover in 2006 was very high and varied between 0% to 100%. This reflects a wide diversity of the surveyed sample of the firms.

The analysed index does not show considerable variations with regard to the firms' size and age. However, differences concerning the type of activity are noticeable. The highest value of the share of turnover generated from novelties was achieved by IT firms (100%). Trading, service and manufacturing firms achieved values close to the average for the whole sample, whereas the value of

the index for construction firms was less than half of its value for the whole sample (15%).

The surveyed firms were divided into two categories: (1) the firms with the lower innovativeness level i.e. those characterized by “a lower share of turnover generated from novelties”, where the share of turnover generated from novelties in 2006 was less than 30% of the total turnover (58% of the total number of firms) and (2) the firms with the higher innovativeness level i.e. those characterized by “a higher share of turnover generated from novelties”, where the share of turnover generated from novelties exceeded 30% of the total turnover (24.7% of the sample). Both groups differ significantly with regard to the value of the index that took the value of 14.6% for the firms with a lower innovativeness level and a high 67% for the firms with a higher innovativeness level (see Table 2).

**Table 2. The distribution of firms with respect to innovativeness (in %)**

| Specification                            | % of total firms | Index of innovativeness |
|--|------------------|-------------------------|
| Firms with a lower innovativeness level  | 58.0             | 14.6                    |
| Firms with a higher innovativeness level | 24.7             | 67.0                    |

Source: own computation.

The external conditions of the innovativeness of the surveyed firms were displayed in spatial and market variations. Relatively the most advantageous conditions for the development of innovativeness took place in large agglomerations (the index of innovativeness amounted to 37.6%). On the other hand, the lowest level of the innovativeness index was reported for the firms located in smaller towns (23.3%). As the type of the market where firms operate is concerned, the broader the market the higher the level of the innovativeness index. The highest level of the index was recorded by the firms active on international markets (48%), and the lowest by the firms active on local markets (27.2%).

## 5.2. The dynamics of employment

The surveyed firms employed 1,851 persons in total. Between 2004 and 2006 they managed to increase an employment level by a small 2% (see Table 3). The span in the growth rate was high. One third of the firms reported an increase in employment, and the next 22.5% of the firms its decrease. The remaining 43.8% of the firms did not show any changes in the level of



employment. In the group of growing firms an average increase (an arithmetic mean) of jobs was high and amounted to 37.9%, whereas the median was 21%.

The analyzed index does not present considerable variations with respect to the firm's age, however the differences with regard to the firm's size are noticeable. The larger the firm, the higher index of the employment growth. Between 2004-2006, a decrease in employment by 0.1% was recorded in micro firms, whereas in small firms there was a growth of employment by 3.8% and in medium-sized firms by 7.5%.

**Table 3. The change in employment of surveyed firms in the years 2004 - 2006**

| Specification                       | 2006/2004 |
|-------------------------------------|-----------|
| Average of employment growth (in %) | 2.0       |
| Median of employment (in %)         | 0.0       |
| Firms with employment growth (in %) | 32.1      |

Source: own computation.

For further analysis, the firms were split into the two groups: non-growing firms, i.e. those who showed no growth or reduced their employment in the surveyed period (67.5% of the total number of the firms) and growing firms, i.e. those who increased their employment in the surveyed period (32.5% of the total number of the firms). Both groups differ significantly as regards the value of the index of the employment change. For the non-growing firms the index value amounted to -14.7% in the surveyed period, whereas for the growing firms it reached a negative value of -36.9% (see Table 4).

**Table 4. The distribution of firms with regard to the dynamics of employment (in %)**

| Specification     | As % of total | Index of change in employment (in %) |
|-------------------|---------------|--------------------------------------|
| Non-growing firms | 67.5          | -14.7%                               |
| Growing firms     | 32.5          | 36.9                                 |

Source: own computation.

The external conditions of the employment growth of the firms were displayed in sectoral and spatial variations. Relatively the most advantageous conditions for the growth took place in IT and manufacturing sectors (an average growth of employment for the years 2004-2006 was 94% and 32.7% respectively). The highest drop was reported by trading firms (a decrease by 47%). The most convenient conditions for the growth occurred in large agglomerations (an average rise of employment between 2004 and 2006 amounted to 47.8%). On the other hand, the most profound fall was recorded by

the firms located in smaller towns (a drop by 60%). Also an intensity of the contacts with the external environment has a noticeable influence on the growth of employment of the surveyed firms. The most beneficial conditions in that respect took place in the case of a well developed collaboration with the environment (an average employment growth for the years 2004-2006 was 94%), whereas the deepest decrease occurred in the case of the firms characterized by the moderately developed collaboration with the environment (a fall by 41%).

### **5.3. The typology of the firms**

The combination of the two dimensions, i.e. the innovativeness and the change of employment enables to make a typology of four different types of the surveyed firms. Table 5 presents their distribution by means of the innovativeness index measured by the share of turnover generated in 2006 from novelties introduced between 2004 and 2006 and the change in the employment level. The most numerous group that embraces 50% of the firms (type I) is formed by the firms characterized by a lower innovativeness level and making no changes in employment. This means that half of the surveyed firms do not contribute to a job generation and they are passive with respect to innovation. Also the group of the firms who increase their employment and are characterized by a lower innovativeness level is quite big in numbers and encompasses 21.2% of the firms (type II). The firms that belong to the remaining groups represent a smaller population. These are either the firms where an employment growth is followed by a low innovativeness level (type III – 15.2%) or the firms where a growth of employment is accompanied by a high innovativeness level (type IV – 13.6%).

**Table 5. The distribution of the firms with respect to the innovativeness and the dynamics of employment\*****Innovativeness**

|  |          |         |   |
|--|----------|---------|---|
| High level of turnover from innovation | Type III | Type IV | <b>Dynamics of employment</b>                     |
|  | 15.2%    | 13.6%   |   |
| Low level of turnover from innovation  | Type I   | Type II | No growth of employment      Growth of employment |
|  | 50.0%    | 21.2%   |   |

\* data for 66 firms

Source: own computation.

The data presented above indicate a certain extent of independence of both analysed factors, that is the innovativeness and the capacity to generate new jobs. Less than 2/3 of the firms support this relationship (the group I and IV).

The growth of innovativeness of the surveyed firms is accompanied only to a limited extent by a greater capacity to generate new jobs. Only 47.4% of the highly innovative firms did realize their potential for the growth of employment. The remaining 52.6% of the highly innovative firms did not record any growth or just the opposite – their employment level fell (35.7% of the firms) due to personal limitations, resource limitations or the lack of the market acceptance for the introduced innovations.

Basically, a growth of employment takes place without an increase in the innovativeness level of the surveyed firms. 60.9% of the total number of the firms reported a rise in employment at the low innovativeness level, while the remaining 39.1% of the firms at the higher level of innovativeness. This means that a general increase in employment was achieved by the less innovative firms.

**Table 6. The selected characteristics by the type of the firm**

| Type of the firm | Average index of innovativeness (%) | Average rate of employment growth (%) |
|------------------|-------------------------------------|---------------------------------------|
| I                | 13.6                                | -10.4                                 |
| II               | 17.2                                | 36.4                                  |
| III              | 66.5                                | -14.4                                 |
| IV               | 65.0                                | 30.8                                  |

Source: own computation.

The innovativeness and the capacity of the different groups to achieve an employment growth is illustrated in Table 6. The analysis of the data confirms the variations between the groups. The group IV (“glamorous”) is characterized by the high levels of innovativeness and the capacity to job generation (65% and 30.8% respectively), whereas the group I („economic core”) is marked by the lowest innovativeness level and a low capacity to generate jobs (13.6% and - 10.4% respectively).

**Table 7. The selected characteristics by the type of the firm (cont.)**

| Type of the firm | Average employment (in persons) | Rate of exporting firms | Share of firms with innovations new to the world |
|------------------|---------------------------------|-------------------------|--|
| I                | 11.6                            | 9.1                     | 6.1  |
| II               | 50.4                            | 28.6                    | 21.4   |
| III              | 30.2                            | 40.0                    | 10.0   |
| IV               | 37.2                            | 33.3                    | 22.2   |

Source: own computation.

The separated types of the firms also show significant differences with regard to other economic indices (see Table 7). The group of the firms with a weak dynamics of the employment growth and a low innovativeness level is marked by the highest average employment in the sample. On the other hand, the group of the firms characterized by a higher innovativeness level and simultaneously a higher dynamics of the growth is composed of smallest entities. A bigger size is typical for the firms with a lower dynamics of employment which points to the larger potential of growth of smaller firms. The index of the share of the exporting firms is much lower in the group of the firms with a lower dynamics of the employment growth and a lower innovativeness level as well as the share of innovations new to the world.

## **6. The assessment of the firms’ capacity to grow in the shadow economy conditions**

Shadow-economy activities exert their influence on the firms’ capacity to grow (see Table 8). However, in the opinion of the enterprises, their influence is rather harmful to their capacity to achieve growth. Nevertheless, it should be stressed that as many as more than one third of the enterprises believe that these activities have a positive influence. This means that a considerable proportion of SMEs have a positive view on the shadow-economy activities as far as the

capacity to achieve growth is concerned. Almost one in ten respondents believe that shadow-economy operations may even create very advantageous conditions to build the firms' capacity to grow.

**Table 8. The influence of shadow-economy activity on the firm's capacity to grow (% of the firms)**

| Specification         | Firms by employment growth |             | Firms by innovativeness level |                   |
|-----------------------|----------------------------|-------------|-------------------------------|-------------------|
|                       | Growing                    | Non-growing | Highly innovative             | Little innovative |
| Definitely favourable | 13.0                       | 9.4         | 10.5                          | 11.1              |
| Rather favourable     | 34.8                       | 20.8        | 10.5                          | 31.1              |
| Neutral               | 8.7                        | 30.2        | 15.8                          | 24.4              |
| Rather harmful        | 34.8                       | 32.1        | 47.4                          | 31.1              |
| Definitely harmful    | 8.7                        | 7.5         | 15.8                          | 2.2               |

Source: own computation.

The assessment of activities run in the shadow economy conditions as regards their influence on the firms' capacity to grow shows considerable variations for the different categories of the enterprises (Table 9). The enterprises that achieve an employment growth underline more strongly a positive impact of the shadow economy on building growth capacities than non-growing firms (48% and 30% respectively). This may suggest that the shadow economy contributed to the success of the expansion of a considerable portion of SMEs, or it is considered by the enterprises planning an expansion as a key success factor for this process.

In the opinion of nearly two thirds of the highly innovative firms, shadow-economy activities produce a harmful effect on the firms' capacity to grow. Only one in five enterprises believe the influence is favourable. A different view on the influence of shadow-economy activities on the firms' capacity to grow is presented by low innovative enterprises – 42.1% of them find an influence of the shadow economy on the firms' capacity to grow as favourable, while one third of them share an opposite opinion. These data indicate that shadow economy activities rather do not favour an economic activity. This concerns undertaking investments necessary to launch highly effective technologies due to a high risk and too small a scale of operations, as well as respecting contracts or property rights protection being practically beyond the reach of shadow-economy enterprises.

**Table 9. The influence of shadow-economy activity on the firm's capacity to grow by type of firm (% of the firms)**

| Specification         | Type of firm |      |      |      |
|-----------------------|--------------|------|------|------|
|                       | I            | II   | III  | IV   |
| Definitely favourable | 9.4          | 15.4 | 10.0 | 12.5 |
| Rather favourable     | 28.1         | 38.5 | 0.0  | 25.0 |
| Neutral               | 34.4         | 38.5 | 20.0 | 12.5 |
| Rather harmful        | 28.1         | 7.7  | 50.0 | 37.5 |
| Definitely harmful    | 0.0          | 0.0  | 20.0 | 12.5 |

Source: own computation.

An influence of the shadow-economy activity on the firms' capacity to grow distinguished by the type of the firm is illustrated in Table 9. The data analysis provides the evidence of the firms' variations. The group II of the firms who increase their employment and have a low innovativeness level is quite distinct as compared with the remaining groups with regard to their very positive assessment of the shadow economy (54% of the firms). Contrary to that, the group III of highly innovative firms with no growth of employment achieved assess the shadow economy in a very negative manner as regards its influence on the growth capacity (70% of the firms). The group of the highly innovative and growing firms have rather a negative view on the influence of the shadow economy on their growth capacities. These data support the previous statements that shadow-economy activities favour rather growth-oriented than innovative activities. However, the shadow economy is not favourable to the most desired activities of firms, that is innovation and expansion that generates new jobs taking place parallelly. A passive role of the shadow economy in building growth capacities was expressed in the opinions of the group I firms that is the firms passive in achieving growth and innovation. The most numerous group of the firms, if already use the shadow economy do it rather for consumption purposes of the entrepreneur's household than for investment and innovation.

## 7. Conclusions

The analysis of the survey results supports a hypothesis according to which the innovativeness and the capacity to generate employment among Polish SMEs that operate in the conditions of profound market transition are independent to a considerable extent. Less than two thirds of the firms support

this relationship: the higher the innovativeness level the higher the capacity to generate new jobs. In the remaining cases (1/3 of the firms) no such correlation was identified. This indicates a high independence of both dimensions of firms' operations.

It is worth noting that only ca. 14% of the surveyed firms are highly innovative that reported a considerable increase in employment. On the other hand, there were more than 15% of the firms with a higher innovativeness level and moderate (or none) employment growth, i.e. the firms that failed to use their growth potential.

Undertaking shadow-economy activities affects the firms' capacity to grow, however in the opinion of enterprises this influence is rather harmful than favourable. Nevertheless, a proportion of SMEs that have a positive view on the shadow-economy activities – as far as the capacity to achieve growth is concerned - is quite substantial. The assessment of activities run in the shadow economy conditions as regards their influence on the firms' capacity to grow shows considerable variations for the different categories of the enterprises. The enterprises that achieve an employment growth underline more strongly a positive impact of the shadow economy on building growth capacities than non-growing firms. This may suggest that the shadow economy contributed to the success of the expansion of a considerable portion of SMEs, or it is considered by the enterprises planning an expansion as a key success factor for this process.

Highly innovative enterprises assess much stronger than less innovative ones that shadow-economy activities are harmful to their capacity to achieve growth. It can be assumed that the shadow-economy activities do not favour innovative activities that require undertaking investments necessary to launch highly effective technologies due to a high risk and too small a scale of operations, as well as respecting contracts or property rights protection being practically beyond the reach of shadow-economy enterprises.

Shadow-economy activities favour rather growth-oriented than innovative activities. However, the shadow economy is not beneficial to the most desired activities of firms, that is innovation and expansion that generates new jobs taking place parallelly. The most numerous group of the firms, if already use the shadow economy do it rather for consumption purposes of the entrepreneur's household than for investment and innovation.

## References

- Baldwin R. E. (1995) *The Effect of Trade and Foreign Direct Investment and Relative Wages*, OECD Economic Studies, vol. 23
- Beloded O. (2005), *Shadow Economy of Ukraine: A Case of Financial Constraints*, National University Kyiv-Mohyla Academy, Kijów
- Calof J. (1994) *The Relationship Between Firm Size and Export Behavior Revisited*, 'Journal of International Business Studies', 2
- Central Statistical Office (2007), *Rachunki narodowe według sektorów i podsektorów instytucjonalnych 2000-2005*, Central Statistical Office, Warszawa
- Djankow S., Liberman I., Mukherjee J., Nenova T. (2002), *Going Informal: Benefits and Costs*, World Bank, Working Paper
- Feel M. S. (2000), *Do Small Innovating Firms Outperform Non-Innovators?*, Small Business Economics, 14, p. 195-210
- Głodek P. (2008), *Szara strefa – zakres pojęcia i podstawowe obszary badań*, [in:] Edward Stawasz (ed.) *Zarządzanie wzrostem małych i średnich przedsiębiorstw w kontekście szarej strefy*, Lodz University Press, Lodz
- Hölzl W. (2009), *Is the R&D behaviour of fast-growing SMEs different?* 'Small Business Economics' 33, p. 59-75
- Kalantaridis C., Pheby J. (1999), *Processes of Innovation Among Manufacturing SMEs: The Experience of Bedfordshire*, 'Entrepreneurship and Regional Development' 11(1), p. 57-78
- Kirchoff B. A. (1994), *Entrepreneurship and Dynamic Capitalism. The Economics of Business Firm Formation and Growth*, PRAGER, Wesport, London
- Schreyer P. (2000), *High-Growth firms and employment*, STI Working Paper 2000/3
- Organisation for Economic Co-operation and Development (1998) *Technology, Productivity and Job Creation*, Vol. 2, Analytical Report, The OECD JOBS STRATEGY, Paris
- Schneider F., Enste D. (2000), *Shadow Economies: Size, Causes and Consequences*, 'Journal of Economic Literature' vol. 38
- Sheikh S., Oberholzner T. (2001), *Innovative Small and Medium Sized and the Creation of Employment, Final Report*, 'Inno-Studies 99 -Lot 9', Vienna, October
- Stam E., Wennberg K. (2009), *The roles of R&D in the new firm growth*, 'Small Business Economics', 33, p. 77-89
- E. Stawasz (2008), *Wpływ działalności w szarej strefie na funkcjonowanie i zarządzanie wzrostem w przedsiębiorstwach w świetle badań*, [in:] Edward Stawasz (ed.) *Zarządzanie wzrostem małych i średnich przedsiębiorstw w kontekście szarej strefy*, Lodz University Press, Lodz
- Storey D. (1994), *Understanding the Small Business Sector*, Routledge, London



- Tether B., Massini S. (1998), *Employment Creation in Small Technological and Design Innovators in the UK During the 1980s*, 'Small Business Economics' 11(4), p. 353–370
- Williams C. C. (2007), *Small business and the informal economy: evidence from the UK*, 'International Journal of Entrepreneurship Behaviour&Research', Vol. 13, No. 6
- Williams C. C., Round J., Rodgers P. (2009), *Evaluating the motives of informal entrepreneurs: some lessons from Ukraine*, 'Journal of Developmental Entrepreneurship', Vol. 14, No. 1

### Streszczenie

#### INNOWACYJNOŚĆ MSP A W POTENCJAŁ TWORZENIA NOWYCH MIEJSC PRACY W KONTEKŚCIE SZAREJ STREFY

Artykuł poświęcony jest zdolności tworzenia nowych miejsc pracy przez innowacyjne MSP w Polsce. Jest on próbą weryfikacji koncepcji B.A. Kirchoffa o istnieniu relacji między innowacyjnością i wzrostem firm. W artykule analizie poddano ponadto niektóre uwarunkowania działalności innowacyjnych MSP, wynikające z ich otoczenia (kontekst sektorowy, charakterystyki rynkowe) oraz konsekwencje wykorzystywania instrumentów charakterystycznych dla szarej strefy. Przeprowadzone badania 81 polskich MSP z regionu łódzkiego potwierdzają hipotezę o występowaniu dużej niezależności między innowacyjnością firm i ich zdolnością do tworzenia nowych miejsc pracy. Wśród badanych firm 14% stanowiły podmioty o podwyższonej innowacyjności i zarazem o szybkim przyroście miejsc pracy. Z drugiej strony bardzo wysoki odsetek stanowiły MSP o obniżonej innowacyjności i słabo rosnące. Do elementów istotnych z punktu widzenia potencjału tworzenia nowych miejsc pracy okazały się warunki rynkowe i sektorowe, trudności z zarządzaniem firmą (brak doświadczenia, trudności ze zgromadzeniem wystarczającego kapitału założycielskiego) oraz brak publicznych programów wspierania. Wyniki badania wskazują, że wykorzystywanie instrumentów szarostrefowych sprzyja raczej działaniom wzrostowym, niż innowacyjnym. Szara strefa nie sprzyja natomiast najbardziej pożądanym działaniom firm, tj. jednoczesnemu podejmowaniu innowacji i ekspansji, tworząc nowe miejsca pracy.