THE IMPACT OF NEW PUBLIC MANAGEMENT ON EFFICIENCY OF WORK AND QUALITY OF SERVICES IN VOCATIONAL EDUCATION INSTITUTIONS

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The impact of New public management on efficiency of work and quality of services in vocational education institutions

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Abstract

The paper analyses impact of New public management on efficiency of work and quality of services in public service institutions. Autonomy is one the principles of NPM that, according to the theory, increases efficiency of work and quality of services in public sector providers. However these assumptions have been scarcely researched in practice. To narrow this gap the experimental reform that implemented greater managerial and financial autonomy in 13 Lithuanian state vocational schools was chosen for research. In order to analyse autonomy’s impact on these variables after the reform, maximally similar institutions (of those that underwent the reform and that didn’t) are compared using quantitative and qualitative methods.

JEL Classification: L3, I2

Key words: Autonomy, New public management, vocational education and training, public establishment, budgetary institution, efficiency of work, quality of services

Introduction

Since independence Central and Eastern Europe has been following the New public management trends as a good practice example of Western countries in improving one’s public sector. New public management (further referred to as NPM) is based on the belief that performance of public sector can be improved with installation of market mechanisms. NPM reforms have been popular in reforming public services institutions, especially in education and healthcare, on the grounds that such market elements and mechanisms as greater autonomy, competition or involvement of market agents would improve the efficiency of their work and the quality of their services. As a matter of

fact, implementation of greater autonomy in public services providers is one of the key principles of
NPM\(^2\). It has been famously implemented in UK’s National Health Service by turning healthcare
providers into autonomous trusts. The Lithuanian case presented in this paper concentrates on
greater autonomy of public service providers.

However it has been noted\(^3\) that Central and Eastern European countries tend to follow international
trends without prior assessment of possible policy outcomes. This becomes especially problematic
since the impact of NPM on efficiency of work and quality of services in public institutions has
only been scarcely researched\(^4\) with even less research concentrating on the impact of greater
autonomy on efficiency of work and quality of services\(^5\). Thus research on Lithuanian reform
presents a golden opportunity to test the impact of NPM on efficiency of work and quality of
services in public service providers empirically.

Lithuanian experimental programme adopted in 2003 restructured 13 vocational schools from state
budgetary institutions into public establishments\(^6\). The reform was undertaken because of the
system’s inefficiency and inflexibility in reacting to learners’ needs that was inherited from the
Soviet era\(^7\). The Program provided vocational schools with greater managerial and financial
autonomy. The schools were allowed to have stakeholders (representatives from private companies,
employer associations, local authorities, physical persons) and the general meeting of stakeholders
became the most important management organ of the school instead of the decision making by the
Ministry of Education and Science (further referred to as the Ministry) as it is for state budgetary
institutions. The stakeholders’ meeting also has a right to appoint and dismiss school director thus

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\(^5\) Order of the Minister of Education and Science of Lithuanian Republic of 2003 June 30 “On confirmation of the programme on experimental restructure of state vocational education institutions into public establishments” // Informacini pranešimai. 2003 Nr. 56-533
making personnel management more decentralized. In addition to this, public establishments have more autonomy in financial matters: contrary to state budgetary institutions, they can use one’s income from selling educational\(^8\) and other services without approval of the Ministry (though only for the expansion and achieving goals of the school).

Table 1. Differences between Lithuanian vocational schools of budgetary and public establishment types

<table>
<thead>
<tr>
<th></th>
<th>Budgetary institution</th>
<th>Public establishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>The main management body</td>
<td>Ministry of Education and science of Lithuania</td>
<td>General meeting of stakeholders</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>None</td>
<td>Ministry of Education and science of Lithuania and private companies, employer associations, local authorities, physical persons of one’s choice</td>
</tr>
<tr>
<td>Cooperation with other agents</td>
<td>Social partners (no formal rights)</td>
<td>Social partners (no formal rights)</td>
</tr>
<tr>
<td>Director appointed by</td>
<td>Ministry of Education and science of Lithuania</td>
<td>General meeting of stakeholders</td>
</tr>
<tr>
<td>Staff appointed by</td>
<td>Director</td>
<td>Director</td>
</tr>
<tr>
<td>Possibility to freely spend state allocated funds</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Possibility to freely spend income from selling services</td>
<td>None</td>
<td>Yes</td>
</tr>
<tr>
<td>Sources of income</td>
<td>State, EU and other international actors, selling of services</td>
<td>State, EU and other international actors, selling of services, stakeholders</td>
</tr>
</tbody>
</table>

The fact that the program has been applied to 13 schools out of 75 makes up favourable conditions for comparing performance of schools that underwent the reform and that did not. Besides, most schools underwent reform in 2003 – 2004, what makes up a lengthy enough period of time for results to appear.

Thus this paper analyses whether greater autonomy had a positive impact on efficiency of work and quality of services in vocational schools after the reform took place. According to the theory of NPM\(^9\), greater autonomy would result in better performance because of several reasons: 1) decentralized decision making is more effective because those who know the most about the institution and its problems are awarded the power to take decisions and through sufficient autonomy they can take them easier; 2) autonomous organizations are better at satisfying the needs

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\(^8\) Vocational education is free in Lithuania, but schools can earn from organising training or re-qualification courses for adults etc.

of customers because they are directly facing them everyday; 3) autonomy creates motivation to work better by creating the feeling of ownership of the institution. It is noticeable that these reasons are mostly based in motivation assuming that given the autonomy personnel in public service institutions will act better to improve efficiency of work and quality of services simply because they can and because they assume that institution is “theirs”.

In this paper efficiency of work is understood in economic terms as maximum output from minimum input while quality of services is understood as correspondence of services provided to the needs of learners and the economy. The research does not aim at establishing standards for efficiency and quality in vocational schools, but rather compare schools of different types in order to find out whether public establishments are more efficient and provide better quality of services than budgetary institutions.

In order to do this, a group of 13 state budgetary vocational schools (referred to as the control group in tables and diagrams) were chosen for comparison with public establishments (referred to as the reform group). Groups for comparison were chosen according to the data on size (overall number of learners) and on the number of learners who graduated successfully – all data before the experimental programme was started. Previous research\(^\text{10}\) indicated better efficiency of larger vocational schools due to economies of scale thus size had to be controlled for while the number of successful graduates (linked to the school’s size, of course) was chosen as a quantitative measure of quality. Also, groups were checked for comparability with the experts on vocational education from the Ministry. This way maximum similarity between the comparison groups before the reform was ensured. Moreover, the research used both quantitative and qualitative methods for data collection and analysis. The quantitative research is based on the chronological data received form the Ministry, Statistics Lithuania and Lithuanian Labour Exchange. The qualitative research is based on 27 interviews conducted with the key informants of vocational education – directors of both types of vocational schools, their stakeholders and social partners, Ministry officials.

The paper consists of two parts. The first part (findings) consists of two chapters which present the results of quantitative and qualitative analysis of the subject separately. For the sake of convenience

both analyses are separated into chapters with results on efficiency of work and quality of services. The results of the whole analysis and implications for NPM are presented in the conclusion part.

Findings

1. Quantitative analysis
A set of criteria indicating efficiency of work and quality of services were chosen for the quantitative analysis. Comparison by these criteria was carried out by calculating and interpreting the data of years 2004 – 2010 that was received from the Ministry of Education and Science, Statistics Lithuania and Lithuanian Labour Exchange.

1.1. Efficiency of work
The expected changes in efficiency of work in vocational schools as a result of reform were measured by the following criteria:

*Ratio between school’s budget and the number of its learners*
This criterion indicates the cost for a school to prepare one learner. The lower the cost, the higher the efficiency of work what also means that more learners can be educated for the same cost. In order to calculate this criterion schools’ total income is divided by the total number of their learners. Note that not all income is allocated for learners’ training directly. However preparing learners also requires income allocated for the maintenance of the school therefore total income is taken into account.

<table>
<thead>
<tr>
<th>Group/Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reform group</td>
<td>5.1</td>
<td>5.1</td>
<td>5.8</td>
<td>7.1</td>
<td>9.1</td>
</tr>
<tr>
<td>Control group</td>
<td>3.7</td>
<td>5.4</td>
<td>6.3</td>
<td>8.7</td>
<td>10.5</td>
</tr>
</tbody>
</table>

*Source: prepared by the author using the data of Statistics Lithuania and the Ministry*

The data indicates that even though the size of the budget allocated for one learner has been growing in both types of schools, the ratio is smaller in case of public establishments. Even though
this is not economic efficiency per se (because the ratio was not decreasing) but in comparison to budgetary institutions public establishments appear more efficient according to this criterion.

Ratio between the number of teachers and learners

Cost of learners’ preparation might also be calculated in human resources. Smaller teachers-to-learners ratio indicates efficiency in the same way it does for financial resources.

Table 3. Number of teachers per learner

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reform group</td>
<td>0.1</td>
<td>0.09</td>
<td>0.09</td>
<td>0.09</td>
<td>0.07</td>
<td>0.07</td>
</tr>
<tr>
<td>Control group</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.09</td>
<td>0.07</td>
<td>0.07</td>
</tr>
</tbody>
</table>

Source: prepared by the author using the data of Statistics Lithuania and the Ministry

The data shows that the number of teachers has been decreasing in both types of schools: there were 10 teachers for 100 learners in 2004 and 7 teachers for 100 learners in 2009. There seems to be a small advantage on the side of public establishments in 2005 – 2007 but the tendency does not seem to continue prompting us to make a conclusion that there is no difference between two types of schools in terms of this criterion. This conclusion is further supported by the ratio between vocational education teachers and learners (see table 4 – this ratio was chosen because vocational education teachers are the basis of vocational schools). Even though the Ministry sets the number of teachers regardless of the school type, schools have some flexibility to change it what might explain the afore-mentioned difference in years 2005 – 2007 but overall public establishments do not use this to their advantage.

Table 4. Number of vocational education teachers per learner

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reform group</td>
<td>0.06</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.04</td>
</tr>
<tr>
<td>Control group</td>
<td>0.06</td>
<td>0.05</td>
<td>0.06</td>
<td>0.05</td>
<td>0.04</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Source: prepared by the author using the data of Statistics Lithuania and the Ministry
**Ratio between incomes from the state budget and other sources**

This criterion encircles two types of income vocational schools receive. The first one is income received from the state budget while the second is non-state, i.e. the income that schools either receive or earn from other agents such as national physical and legal persons (through selling services or receiving donations from stakeholders) and international institutions such as the EU. From the state point of view, schools that have greater share of non-state income are more efficient because it means smaller input of the state for the same output.

**Table 5. Number of times that non-state income is less than state budget income**

<table>
<thead>
<tr>
<th>Group/Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reform group</td>
<td>7.86</td>
<td>6.72</td>
<td>7.52</td>
<td>6.34</td>
<td>2.77</td>
</tr>
<tr>
<td>Control group</td>
<td>17.11</td>
<td>11.21</td>
<td>9.26</td>
<td>3.87</td>
<td>2.59</td>
</tr>
</tbody>
</table>

*Source: prepared by the author using the data of Statistics Lithuania*

Since data indicates (see table 11) that income received from the state budget has been increasing for all vocational schools, therefore the decreasing ratio indicates growth in income allocated from non-state actors. As table 5 shows, public establishments had better record than budgetary institutions up to the last years. However, it is worth noting that a significant improvement in budgetary institutions in years 2007 – 2008 happened because of great increase in income from the EU grants\(^{11}\), most of which was aimed at improvement of the infrastructure. Even though it means that the state has to finance schools less, EU grants are not as stable source of income as the income from selling services, moreover, schools are not free to choose how to spend these funds. So in order to draw a more accurate picture, income from international actors has been excluded from the analysis:

**Table 6. Number of times that income form physical and legal persons is less than state budget income**

<table>
<thead>
<tr>
<th>Group/Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reform group</td>
<td>12.5</td>
<td>9.2</td>
<td>9.6</td>
<td>9</td>
<td>7.9</td>
</tr>
<tr>
<td>Control group</td>
<td>21</td>
<td>13.7</td>
<td>11.2</td>
<td>19.4</td>
<td>9.4</td>
</tr>
</tbody>
</table>

*Source: prepared by the author using the data of Statistics Lithuania*

\(^{11}\) European Social Fund and European Regional Development Fund grants provided under the Lithuanian 2004-2006 Objective 1 Single Programming Document
Table 6 shows that public establishments have clear advantage over budgetary institutions for they earn more from selling their services as well as receive more donations from stakeholders.

1.2. Quality of services

When it comes to choosing criteria for quality one should keep in mind that universal definition of quality in education is very difficult to come up with and even more difficult to measure. Therefore some of the following criteria indicate quality directly (i.e. there is a direct causal link between quality of education and the chosen factor) while others indicate it indirectly (the factor might be a sign of better quality but not necessarily).

*Share of learners who have successfully completed the education*

Since there are national standards on what constitutes a person who successfully finished the education, the share of these persons from all those who entered the education directly indicate the quality of education – the more the better. However even though the programmes of 3 years duration are the most common in Lithuanian vocational schools, there are also programmes of 1 - 2 years what can make calculation of this criterion inaccurate. In order to make the calculation as accurate as possible adjustments have been made according to the number of learners entering into programmes of different duration: those schools (of both types) that had more than 40% of learners in programmes of 1-2 years have been taken out of the analysis (along with their comparison counterpart) thus making analysis of both groups more equal. The result is as follows:

Table 7. Share of learners who successfully completed education

<table>
<thead>
<tr>
<th>Group/Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reform group</td>
<td>65.4%</td>
<td>63.2%</td>
<td>61.3%</td>
<td>54.1%</td>
<td>61.7%</td>
<td>64.3%</td>
</tr>
<tr>
<td>Control group</td>
<td>61.4%</td>
<td>71.5%</td>
<td>65.3%</td>
<td>54.2%</td>
<td>60.7%</td>
<td>67.5%</td>
</tr>
</tbody>
</table>

Source: prepared by the author using the data of Statistics Lithuania and the Ministry

The result indicates that, contrary to the theory of NPM, public establishments do not prepare more successful learners than budgetary institutions do. It might also seem that budgetary institutions are even better but since analysis is not 100% accurate the research is going to refrain from making such conclusions.
Qualification of teachers

This criterion is another one of those that directly indicate the quality of services because the qualification of teachers directly influences the quality of services.

Table 8. Share of teachers with higher education (of all teachers)

<table>
<thead>
<tr>
<th>Group/Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reform group – all teachers</td>
<td>75.8%</td>
<td>79.5%</td>
<td>80.2%</td>
<td>79%</td>
<td>77.7%</td>
<td>79.3%</td>
</tr>
<tr>
<td>Control group – all teachers</td>
<td>72.8%</td>
<td>75.1%</td>
<td>76.8%</td>
<td>77.7%</td>
<td>76.2%</td>
<td>76.3%</td>
</tr>
<tr>
<td>Reform group – vocational education teachers</td>
<td>36.8%</td>
<td>36.4%</td>
<td>37.4%</td>
<td>38.3%</td>
<td>43.1%</td>
<td>45.6%</td>
</tr>
<tr>
<td>Control group – vocational education teachers</td>
<td>31.6%</td>
<td>30.8%</td>
<td>34.9%</td>
<td>34.5%</td>
<td>36.2%</td>
<td>35.8%</td>
</tr>
</tbody>
</table>

Source: prepared by the author using the data of Statistics Lithuania

The data shows that public establishments employ more teachers (in general and of vocational education) who have higher education. This indicates greater motivation of these schools to invest in qualification of teachers.

Share of graduates registered in Lithuanian Labour Exchange

Lithuanian Labour Exchange registers the unemployed persons and helps them in search of a job. If a graduate is registered with the Labour exchange after the completion of the education one can presume that she was unable to find a job. This way, the greater the number of graduates from a certain school that registered with the Labour Exchange, the less the vocational schools corresponds to the needs of its learners and the labour market.
Table 9. Share of graduates registered with the Labour Exchange year after the graduation

<table>
<thead>
<tr>
<th>Group/Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reform group</td>
<td>18.5%</td>
<td>11.6%</td>
<td>13%</td>
<td>17.2%</td>
<td>47.7%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Control group</td>
<td>16.8%</td>
<td>9.9%</td>
<td>12%</td>
<td>16.6%</td>
<td>54.4%</td>
<td>8.3%</td>
</tr>
</tbody>
</table>

Source: prepared by the author using the data of Labour exchange

“Crisis years” 2009 – 2010 seem to be pointing to public establishments’ better adaptation to market needs but overall, contrary to what the theory of NPM has to say, public establishments (most of which have stakeholders from the private sector) do not correspond to the needs of the market and learners better than budgetary institutions. However these results can be influenced by the choice of stakeholders in public establishments. These schools have 1 to 3 stakeholders (excluding the Ministry) and there are cases when stakeholders from private enterprises are not interested in the whole range of programmes that the school is delivering. However if this reason was correct, then schools with stakeholders from employer associations (1 group, see table below) that are naturally interested in much broader range of training programmes than any individual employer should have better employment indicators than schools that have individual enterprises and local self-government administrations as stakeholders (2 group):

Table 10. Share of graduates registered with the Labour exchange: comparison of 1 group and 2 group

<table>
<thead>
<tr>
<th>Group/Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 group</td>
<td>26%</td>
<td>17%</td>
<td>17.7%</td>
<td>22.3%</td>
<td>55%</td>
<td>5%</td>
</tr>
<tr>
<td>2 group</td>
<td>12.5%</td>
<td>10.5%</td>
<td>12%</td>
<td>9.5%</td>
<td>28.5%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

Source: prepared by the author using the data of Labour exchange

Of course there are many other factors that influence employment, but in order for them to be accounted for in this research it has to be shown why the same factor should impact these schools of different type differently, what does not seem likely.

Changes in the curriculum

While three criteria described above indicate quality of services directly, the ones from now on indicate it indirectly. This criterion calculates how often vocational schools made changes to their curriculum (by introducing new programmes or renewing the old ones). It is presumed that more frequent changes occur in schools that are more motivated to improve the quality of its education (but the contents of the change are not know therefore it cannot be assumed that programmes got better).

Diagram 1. Frequency of renewing and introducing new programmes into the schools’ curriculum

The diagram shows that public establishments are more active in changing its curriculum. On average in 2004 – 2010 these schools renewed their curriculum 9 times, while the budgetary institutions did so 7.3 times. Moreover, none of the budgetary institutions have renewed their curriculum so far in 2010 (5 of the public establishments have done this).

Number of learners who entered the schools

While there is more than one reason why persons choose one education institution over another, one of these reasons might be greater prestige of the education institution due to its greater quality (hence the indirectness of the criteria)\textsuperscript{13}.

\textsuperscript{13} Other external factors why persons choose certain institution like geographical situation, demographic condition and
As the data indicates, schools that underwent the reform are more popular than those that did not. In part this might be explained by the fact that these schools are more prestigious, considered to be better than budgetary institutions because of their quality.

**Financial resources**

Greater financial resources might be used for improving the quality of education. The table below summarizes financial resources vocational schools have.
Table 11. Income sources of vocational schools, thousands of litas

<table>
<thead>
<tr>
<th>Group/Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reform group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All sources</td>
<td>21566.2</td>
<td>34378.3</td>
<td>39097.2</td>
<td>60706.9</td>
<td>76610.9</td>
</tr>
<tr>
<td>State</td>
<td>19130.8</td>
<td>29925.6</td>
<td>34507.4</td>
<td>52438.7</td>
<td>56311.6</td>
</tr>
<tr>
<td>National physical and legal persons</td>
<td>1529.9</td>
<td>3266.2</td>
<td>3605.2</td>
<td>5797.1</td>
<td>7085.2</td>
</tr>
<tr>
<td>International and foreign institutions</td>
<td>905.5</td>
<td>1186.5</td>
<td>984.8</td>
<td>2471.1</td>
<td>13214.1</td>
</tr>
<tr>
<td>Control group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All sources</td>
<td>13549.5</td>
<td>27946.1</td>
<td>31403.3</td>
<td>59973.3</td>
<td>74853.6</td>
</tr>
<tr>
<td>State</td>
<td>12857.4</td>
<td>25657.9</td>
<td>28342.2</td>
<td>47659.6</td>
<td>53975.7</td>
</tr>
<tr>
<td>National physical and legal persons</td>
<td>614.4</td>
<td>1877.7</td>
<td>2528.4</td>
<td>2516</td>
<td>5714.8</td>
</tr>
<tr>
<td>International and foreign institutions</td>
<td>77.7</td>
<td>410.5</td>
<td>532.7</td>
<td>9853.8</td>
<td>15175.8</td>
</tr>
</tbody>
</table>

Source: prepared by the author using the data of Statistics Lithuania

As the results indicate, public establishments in general have more financial resources. While greater state support could be attributed to higher learner numbers it is clear that public establishments receive more financial resources from national physical and legal persons. Budgetary institutions cannot compensate these shortcomings with EU grants because these funds cannot be spent freely and flexibly to the needs that arise. On the other hand, it should also be mentioned that it is not known whether public establishments spent their greater resources on quality thus it can only be concluded that they have better conditions to improve it.

To sum up quantitative analysis, schools that underwent the reform are more efficient when it comes to the cost of one learner (but not when it comes to the teacher-to-learner ratio). When it comes to sources of income the only income that is not pre-planned on where it has to be spent is income from physical and legal persons. Both types of schools can decide how to spend this income (including on teachers’ qualification) but only public establishments can do that without coordination with the Ministry. Moreover, public establishments earn more of this income. These two factors combined make public establishments more efficient in terms of the state financial
burden, meaning that they can achieve more with the “free” finances without increasing the burden on the state to finance them additionally. It is worth noticing however, that aside from these quantitative differences, more income, regardless of the source, does not indicate more efficient management of the funds. Also even though quantitatively the cost of one learner is better on the side of public establishments, this was achieved not because of efficiency increasing methods but because of growing number of learners therefore better indicators of public establishments does not indicate greater motivation to improve efficiency.

Quantitative analysis of quality indicates that all indirect quality criteria fall on the side of schools that have greater autonomy: they tend to have better motivation to improve their curriculum and they score higher when it comes to attracting learners and financial resources. However indirect indicators do not show greater quality but rather conditions for better quality. Besides more income enables them to accept more learners (since the Ministry would pay for learners accepted more than planned only next year). Thus the question is whether public establishments are really more popular or just able to afford more learners. Regarding direct indicators public establishments do have more qualified teachers but that does not significantly contribute to the share of learners who successfully finished the course and the share of graduates who registered with the Labour Exchange. This prompts us to believe that even though public establishments have better conditions for quality improvement they do not necessarily use them to their advantage.

2. Qualitative analysis

In order to spot qualitative differences that might have occurred between the reform and the control groups, 27 interviews with actors of vocational education were carried out (11 interviews with directors of public establishments, 7 with directors of budgetary institutions, 1 with Ministry officials of the vocational education sphere, 6 with stakeholders and 2 with social partners). Mind that some interviews were carried out more than once (e.g. with Ministry officials) and stakeholders also had experience with being social partners.

2.1. Efficiency of work

Confronted with a question why public establishment is better many directors of these schools mentioned greater financial autonomy that has already been elaborated on above. Coupled with bigger income from non-state national sources this makes up a significant impact on efficiency.
Secondly, as public establishments’ directors mentioned, meetings with stakeholders are formally regulated and thus take place more often in comparison to centralised decision making by the Ministry. Also meetings with stakeholders can be called ad hoc to deal with any challenges faster than meetings with the Ministry because of geographical proximity. Finally, decisions in the stakeholder meetings are taken “right here and right now” without the lengthier coordination with the Ministry. Thus schools with greater autonomy can be more efficient when it comes to decision making because of less time spent while governing the school.

It was also noticed by the public establishment’s director and Ministry officials that it is obligatory for public establishments to conduct independent audit every year, while budgetary institutions were checked every three years by the Ministry (though the Ministry can ask them to report anytime). Thus possible problems in reformed schools can be eliminated faster simply for the reason that they can get noticed faster.

So it should be noted that public establishments are not confined to lengthier process of governing the school that budgetary institutions have. However just because processes can be sped up, it does not mean they will be. But there do not seem to be obstacles for stakeholders not to carry out actions faster if possible (aside from human factor which is also present for budgetary institutions).

2.2. Quality of services

No schools of both types specified any special steps that were undertaken after the reform in order to improve the quality of services. Thus following the theory of NPM that market agents contribute to better performance of public service institutions\(^\text{14}\), the public establishments were asked about the engagement of stakeholders in the process of quality improvement. Likewise, budgetary institutions were asked about the involvement of their social partners.

Almost every public establishment mentioned material gains from the stakeholders. Most often it is not the transfer of financial funds (thus proving that out of total income from physical and legal persons public establishments earn more from selling services) but rather purchasing equipment or

restoring buildings. When stakeholders themselves provide material equipment, learners are taught with better and / or newer equipment. However as it was noticed in quantitative analysis, budgetary institutions have greater income from the EU grants thus having roughly the same conditions for indirect improvement of quality from investment into infrastructure. But when EU grants cease what matters is the capability to attract funds from physical and legal persons. The question however is whether budgetary institutions’ social partners are motivated to contribute materially just as much as those of public establishments. None of the interviewees mentioned that social partners significantly contribute financially to the school. This might be explained by the fact that the contribution of social partners is not protected: stakeholders get back their material deposit if they quit while social partners do not. In the same way, stakeholders can choose themselves to cease being stakeholders while the social partner might cease being one because of one-sided decision of the school. Moreover, even if the social partner wants to contribute materially, it is more difficult to do so for the budgetary institution: for example, local authorities if they are not stakeholders cannot donate money to schools and stakeholders can much more easily loan their equipment or buildings to the school, as it was noted by the stakeholders.

Secondly, publish establishments’ interviewees tend to agree that stakeholders are involved in the process of improving curriculum and sometimes even in preparing new programmes altogether. Also one of the requirements for the new programme to be launched is that the school should have sufficient practice in certain specialty and stakeholders can provide that by allowing training in their facilities. However, some leaders of budgetary institutions also mentioned that their social partners are involved in this process (and these schools tend to have curriculum renewal frequency just as high as that of public non-profit organizations). Besides, interviewees (directors, stakeholders, social partners) agree that both stakeholders and social partners from private enterprises have the same interest in involvement with vocational schools – that is, quality workforce. To add to this we have the insight that it does not cost financially for social partners to be involved both in curriculum setting and helping with practice. All this makes us believe that motivation and activity of social partners or stakeholders does not depend on the juridical form of the school when it comes to curriculum improvement.

Thirdly, motivation to seek better quality is an important criterion. But motivation is not enough if one does not have an ability to influence change. In case of public establishments their stakeholders
have full access to the information of the school any time they demand it and directors must report to them every year about the situation of the school. While in budgetary institutions social partners have access to the information only when school director wants to provide it. Only the Ministry receives paper report every year and it can be believed that one Ministry might find it difficult to keep a close eye on every one of 75 state vocational schools. Also social partners not only do not have the same capabilities to influence change, but they also do not have the same motivation. They are not involved in the decision making process and it was already established that their material input is smaller while public establishments’ directors and stakeholders mentioned that stakeholders feel responsible for the school because it is “their” school. Plus stakeholders believe the reasons why being a social partner is not enough is the lack of ability to influence decisions and check the spending of finances. For example, the right to replace the director by the general meeting of stakeholders was executed in one public establishment when the director was believed to be doing a poor job, while in budgetary institutions replacement of a director is a lengthy bureaucratic procedure, as the Ministry officials noted. However for the sake of truth it has to be noted that stakeholders might lose interest in the school: in the interview one of the stakeholders mentioned that there is no need for the school anymore (because of existence of well-qualified workforce) so the motivation of the stakeholder to be involved with the school decreased.

Conclusions

The purpose of this research paper was to find out whether greater autonomy – one of the main principles of New public management – brought about better efficiency of work and quality of services in Lithuanian public vocational schools. The results show that schools with greater autonomy are more efficient because the structure itself makes them more efficient: they are less controlled by the Ministry and their decision making happens inside stakeholders’ meetings which happen more regularly and often; they can use their greater finances (from legal and physical persons) faster without coordination with the Ministry thus being able to react to the needs of the school more flexibly; they are required to conduct audit every year instead of being checked by the Ministry every three years making problem solving faster. The quantitative analysis also shows that public establishments are more efficient when it comes to cost for one learner that is smaller than in budgetary institutions enabling them to prepare more learners. Also public establishments receive more income from paid services making them more efficient from the point of view of the state.
input since that means that the school is more capable of supporting itself (plus more income enables to accept more learners thus contributing to other parameters of efficiency). Thus the assumption of NPM that greater autonomy leads to better efficiency is confirmed. However, contrary to what the theory says, this happens not because autonomy creates better motivation to achieve greater efficiency, but because the structure itself is conducive to efficiency with less barriers and limitations put on the schools (thus allowing personnel that are motivated anyway to act freer). Also the structure allows having stakeholders who were reported to have motivation to demand better use of income.

When it comes to quality of services, however, the results of both quantitative and qualitative analysis show that even though autonomy creates favourable conditions for improvement of quality of services, it does not ensure that these conditions would be used. For example, public establishments have greater financial resources that can be used for the improvement of quality; they have greater motivation to change the curriculum and stakeholders have abilities to demand greater quality (and overall better performance) because of sense of responsibility and possessiveness. But quantitative indicators such as the share of learners who successfully finished the course or the share of graduates who registered within the Labour Exchange show no difference between budgetary institutions and public establishments (even though the latter have teachers of better qualification). Of course, there might be qualitative differences like the investment of the stakeholders into better and newer education equipment but it is difficult to say how often that happens. And when it comes to providing of market information (e. g. for curriculum) or accepting learners (and teachers) to practice in private enterprises, these activities do not depend on stakeholders exclusively – social partners seem to have the same capabilities and motivation to help schools in this sphere. Thus it might be suggested that growing popularity of reformed schools is because of investment into exterior of the school (buildings, advertisement etc.) and ability to afford more students rather than actual improvement in quality.

Why autonomy works better for the efficiency of work than quality of services? Firstly, this is because the structure of public establishments automatically brings about more efficiency (faster decision making and easier financial management) but does not automatically bring about better quality that has to be created by using autonomy and efficiency. Secondly, efficiency is one-dimensional – it is common knowledge that less finances for the same results is better, while quality
of services can manifest itself in many indicators and it is not clear which one should be chosen. This is especially true when it comes to having stakeholders representing employers who are less aware of the academic processes and teaching methods. Thirdly, because of scarcity of financial resources efficiency takes precedence over quality. Besides investments into quality of services might be consciously postponed in order to invest into, let’s say, restoration of buildings. Finally, the quality of services depends also on the choice of stakeholders: only private enterprises might purchase training equipment, moreover, to which specialties taught in the school stakeholders will be able to contribute depends on their field of work.

Overall it might be suggested that the theory of NPM that claims that autonomy brings about better motivation to increase efficiency and quality of services is not supported. Even though stakeholders in some aspects (like management of finances) probably have better motivation to improve the institution than social partners have, what matters is the creation of the legal structure that allows having stakeholders, not the motivation in itself. Plus the chance that the stakeholder will lose interest in the institution should be taken into account. And even structure in itself is not going to bring about better quality of services unless quality is demanded. Thus NPM should better concentrate on creating favourable structures that would not only enable better quality but ensure it along with even greater efficiency. For example, introducing performance measures\textsuperscript{15} to complement autonomy could be such a structure. That way instead of just “letting managers manage” we will “make managers manage” as the NPM could say.

\textsuperscript{15} I.e. criteria that indicate how well institutions are performing, for example, a certain share of successful graduates. Institutions have to achieve these criteria and account for them to the Ministry. For example, see Lundberg D. (1994) Decentralization of public vocational training in New Zealand, and two Australian states Training policy study: No. 9 (1994) Geneva: International labour office ISBN-92-2-109254-2 p. 7 and Wittmann E. (2006) Reducing school administration to a technicality? Philosophical reflections of senior German school administrators in the context of New Public Management-based vocational school reform Int. J. Leadership in education Vol. 9, No. 2 (2006) p. 111–128
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