Managing Endowment Fund Income in Universities

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Abstract. In this paper, we discuss the methods of endowment management existing in the world and their applicability to the Russian university system. Endowment spending research focuses on the following issues: reinvesting endowment income; identifying the size of expendable endowment income; using the endowment "body", not just its income; choosing endowment spending policy, rules and rates; as well as others. We provide an overview of endowment fund financial indicators and endowment spending allocation in Russia. Based on the example of HSE's Endowment Fund, we analyze the use of endowment spending rules and a model of financial indicators for 2008–2014. The University's Endowment Fund spending policies demand implementing a principle of preservation, which may be reasonable in a stable economy. However, the viability of the principle is questionable during a crisis, the more so since the endowment is mostly in rubles. Using net asset valuation methods, the HSE Endowment Fund could provide intergenerational equity with an annual distribution of income in favor of current and next generations.

Keywords: higher education, universities, higher education institutions, endowment fund, endowment income, endowment spending, pact between generations, preservation principle.

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There are a number of issues that universities have to deal with when spending endowment[1] income: capital reproduction, which covers inflation and increases the "body"[2] of the endowment; managing administrative costs, the size of which should not significantly affect the size

[1] An endowment fund, which was invented to support universities, is a special kind of fund raising charitable donations to finance a university's activities. Raised money is placed in the trust of an asset management company whose goal is to gain permanent income and transfer it to the university. As a result, donations are added to the fund and yield yearly revenues from trust management. Only earned money is spent, while the "body" remains untouched (except for some minimum rates in accordance with the law).

[2] The nonexpendable portion of the endowment fund.

of the endowment; balancing income payouts in terms of their frequency, size, spending policies, etc.

The rational use of endowment income in universities has been discussed in scientific literature and tested in applied research. In particular, Nobel laureate James Tobin [Tobin, 1974] introduced the intergenerational equity concept, which is based on spending investment gains on current and future generations in a balanced way. This principle allows universities to preserve and increase their capital for future activities and ensure financial stability at present, as they use up to 30% of endowment income to fill the gaps in their annual budgets [Dyachkova, 2013].

The intergenerational equity concept proposed by Tobin is built around the need to distribute financing fairly between the present and the future through a sustainable use of resources. Each generation should take care of the next: as it receives resources from preceding generations, it should preserve a fair amount of the capital for generations to come, while financing its own activities to an appropriate extent. A fair distribution of resources between generations is only possible if generations are perceived as a collective whole: on the one hand, one cannot only think about his or herself and deprive future generations of funds by spend everything now, but, on the other hand, it is no use putting everything away for later and ignoring present-day needs. Future generations will continue to develop our projects just as we are developing the contributions made by our forbearers. Of course, this principle cannot be enforced in an agreement between generations. It can only be part of the policies implemented by endowment funds.

Contemporary theories discriminate between restricted and unrestricted endowments. The latter may be spent or applied at the discretion of the trustees, while the former can only be used for the purpose indicated in the donation agreement or in the last will and testament of the donor. The Russian institutional environment implies creating special-purpose capital within the endowment fund in this case.

Russian funds and universities have been analyzed to find that most endowments are unrestricted, unlike abroad. In cases where donors indicate specific spending purposes, the money most often goes to human resource development, such as financing for professors and students, as well as to the development and promotion of innovative education programs, libraries, and research. Purposes can be very specific sometimes, like scholarships for a particular category of students or financing a professorship in a specific course or field of study.

In their overviews of endowment income-use practices, foreign experts stress that endowments are often used to support structural units of universities, with the major part of donations still accounting for the university as a whole. Support of individual structural units is less common in Russian universities, since special-purpose capital should be allowed within the endowment fund for this purpose. However, standalone capital funds may be created for specific structural

units. The ratio of unrestricted and restricted endowments is approximately 4:1 (80%and 20%, respectively) in Western Europe, while there is still no uniform ratio model in Russia. The average proportion of restricted endowments across top universitiesis 30–60%, while some institutions have unrestricted endowments alone.

Modern endowment-spending research focuses on the following issues: reinvesting endowment income; identifying the size of expendable endowment income; using the endowment "body", not justincome; choosing an endowment spending policy; etc. Expert discussion of these issues is based on application practices, which have become extremely vital for Russia as well, because the accumulated experience requires a rational approach to the use of income. Learning from foreign experience helps avoid risks and pitfalls. This article aims to analyze the existing methods of endowment management and the possibility of applying them in a Russian context.

Research on using endowment income

The Ford Foundation established the Advisory Committee on Endowment Management in 1967 [Ford Foundation, 1972] to integrate educational endowment practices. Having analyzed university reports, they concluded that American universities had a low reputation in endowment management. This happened because endowment management is designed to avoid losses and preserve income, while universities find their primary task in maximizing their long-term revenue; they have to increase profit to afford heavy annual expenses while at the same time provide for sustainable growth and a significant increase of the endowment in the future.

One of the key applied questions discussed today by leading expert organizations is which spending rate should be accepted as feasible when distributing endowment income. Experts at the Ford Foundation determined the annual spending rate to be 5%of the endowment. Their recommendations became the standard for most American universities [Mehrling, 2003]. Even with an approximate spending rate of 10% over the last ten years, nearly all universities kept adhering to the "five-percent rule". As a result, the bodies of endowments increased substantially. This strategy aroused justified criticism in the academic world, and alternative endowment income spending policies are being developed.

New disputes over endowment income spending were raised when a study by the American Council on Education (ACE) found that most American universities had adopted a smooth spending course [American Council on Education, 2014]. The typical smooth spending model consists in using only part of an endowment's income in profitable years, thus providing a comparably sized cushion for "difficult" periods. This endowment investment strategy on average yields 8% annually, so the 5% model rate is achievable when covering for inflation and necessary administrative costs. Yet, universities lapse from

the accepted spending policy when predicting long-term endowment income and "body" growth rates: they raise spending rates in times of consistent economic growth, at the same time allowing for additional reserves for less promising years.

Today, everyone understands the need for large-scale research on endowment fund operations, including an analysis of spending policies, based on annual reports prepared by NACUBO[3] and Commonfund,[4] two major corporations. According to reports from 2005–2014, the average return on a university endowment in the US was 7.4%. The lowest rate was recorded in 2009 at –18.7%, and the highest was recorded in 201119.2%. The average spending rate over the last decade is 4.5%, with 4.4% in 2014 and $500M + in endowment spending over 5% in 2010 and 2011.

According to a survey conducted by the Commonfund Institute in 2012 [Rogers, 2012], most universities stick to one of the following three endowment spending methods: the moving average method, the inflation-protected method, and the hybrid method. In the moving average method, the spending rate (normally 4–5%) is determined depending on the market value of an endowment for a certain period of time, usually 3–5 years. Over 82% of American universities applied this spending rule in 2005 [Subanova, 2011]. The inflation-based approach adds an inflation rate to last year's spending. The hybrid method combines the first two: the spending rateis defined based on the average market value of an endowment over a certain period of time plus the prior year's spending adjusted for inflation.

Therefore, as experience in university endowment management has grown and as new challenges emerged, the methods of endowment spending rate calculation improved. Originally, the funds had to assess the viability of spending, offset payouts, and cover for inflation. However, several waves of crisis gave rise to smooth spending strategies, including those using stabilization funds, and to hybrid spending methods that take into account all the factors affecting endowment size.

Endowment spending methods around the world

Endowment spending methods may be divided into four main groups, each with specific features.

Simple methods include *spending all current income* (net of endowment management fees) and *deciding on an appropriate rate each year* [Sedlacek, Jarvis, 2010]. The advantage of these methods is they are easy to use. However, the income-based method often restrains the growth of endowment as a whole, shattering the principle of fair distribution of payouts in favor of future generations. The down-

[3] National Association of College and University Business Officers.

[4] Independent nonprofit asset management firm http://www.nacubo.org/

side to the strategy of deciding on an appropriate rate each year is that neither consistent payouts nor long-run stability can be guaranteed.

The second category of methods used to determine the expendable endowment includes asset-value-based methods. One optionis *using a pre-specified spending rate* from year to year. This includes, in particular, the five-percent rule described above. The Louvre Endowment Fund, for instance, uses a 3% spending rate. Universities define the maximum allowable spending rate as the expected level of return net of endowment management fees and anticipated inflation. The spending rate should be determined very carefully, based on a realistic assessment, and adjusted to every meaningful change in financial market conditions. The spending formula looks as follows:

$$\text{Spending}_{\text{year } n} = \text{Spending rate} \times \text{Asset market value}_{\text{year } n-1} \quad (1.1)$$

The second option based on the market value is the *moving average* method, where the spending rate is applied to the average market value of assets over a specified period of time. This is how the spending formula based on a three-year period looks like:

$$\text{Spending}_{\text{year } n} = \text{Spending rate} \times \frac{1}{3}(\text{Market value}_{\text{year } n-1} + \text{Market value}_{\text{year } n-2} + \quad (1.2)$$
$$+ \text{Market value}_{\text{year } n-3}).$$

Smoothing, which results from using the moving average method, provides risk leveling in the highly volatile financial market: the average returns on endowment management were 15.5% in 2013, compared to only 0.3% in 2012.

An advantage of these methods is that they allow for the investing of the aggregate income, which provides for higher returns over time. Additionally, payouts are evenly distributed as to the cost of equity. However, the pre-specified spending rate method has its drawbacks, too: as market conditions are only considered at one specific point of time, payouts may vary greatly from year to year. The moving average method provides a more uniform distribution of payouts, but the whole period of method application may be affected and fast adaptation to growth may be kept down when extreme years enter into the formula.

The third category of endowment spending policies embraces inflation-based methods. They may be of two types: inflation-protected and banded-inflation, the band being calculated using the following formula:

$$\text{Spending}_{\text{year } n} = \text{Spending}_{\text{year } n-1} \times (1 + \text{Inflation rate}). \quad (2)$$

The difference between the inflation-based methods is that the banded-inflation method implies setting the upper (6% of the current endowment value) and lower (3% of the current endowment value)

bounds of spending. Current-year operating costs are planned with adjustments for inflation in case it fits into the specified band, otherwise the upper/lower bound is used.

The strong point of this method is that payouts remain relatively consistent from year to year. However, the asset value is not considered, which threatens the stability of future payouts.

Theα-βapproach divides an endowment into two funds: the original endowment and the stabilization fund [Mehrling, 2005]. The spending rate α is applied to the first fund and the spending rate β is applied to the second one. Thus we get the following spending rule:

$$(3)\quad \text{Spending}_{\text{year } n} = \alpha \times \text{Market value of original endowment}_{\text{year } n-1} + \\ + \beta \times \text{Market value of stabilization fund}_{\text{year } n-1}.$$

The original endowment is a sum of the initial capital and returns on investment. When the original endowment earns excess income, undistributed profit is invested in the stabilization fund, which can be a source of support in times when earnings are less than expected. Normally, the stabilization fund employs a higher spending rate. The moving average method may also be applied in this rule for either of the funds or both.

The α-β approach ensures relatively consistent payouts from year to year, smooth adaptation to changes in the portfolio market value, and high performance under various market conditions. Yet, it has its drawbacks as well, such as dependence on the weights specified for α and β and sensitivity toward market volatility.

The hybrid methods calculate spending using a formula that combines the consistency factor (last year's spending adjusted for inflation) and the market factor (the long-term spending rate applied to the endowment market value). Such methods are used by the most renowned American universities with huge endowment funds and sometimes even obtain their names from those universities.

The Stanford Rule [Sedlacek, Jarvis, 2010] calculates spending as follows:

$$(4.1)\quad \text{Spending}_{\text{year } n} = 0.6 \times \text{Spending}_{\text{year } n-1} \times (1 + \text{Inflation rate}) + \\ + 0.4 \times \text{Spending rate} \times \text{Market value}_{\text{year } n-1}.$$

The Yale Rule[5] employs the following formula:

$$(4.2)\quad \text{Spending}_{\text{year } n} = 0.8 \times (\text{Spending}_{\text{year } n-1} \times (1+ \text{Inflation rate}) + \\ + 0.2 \times \text{Spending rate} \times \text{Market value}_{\text{year } n-1}.$$

[5] http://investments.yale.edu/

A rule similar to that of Yale is applied by MIT[6], where it is referred to as the Tobin Rule.[7] The advantages of this method include consistent payouts from year to year, adaptation to changes in portfolio market value, and the efficient balance of needs due to the weights assigned. However, we should not forget that a compromise cannot provide for optimum results in achieving any of the key objectives, such as capital preservation, the fair distribution of income between generations, and consistent payouts.

Endowment spending in Russia

Quite naturally, the endowment spending policies we covered above have a number of peculiarities in Russia due to, among other things, the regulatory framework. For example, specific interpretations of main concepts by Russian legislation should be taken into account (see Table 1)[8].

Institutional peculiarities of Russian financial indicators require a certain adjustment of the methods proposed in order to provide a comprehensive picture of endowment fund activities.

Table 2 shows the financial indicators of several university endowment funds with the highest transparency in accounting. As we can see, the proportion of university costs covered by endowment income rarely amounts to 1% among state universities, with the exception of Moscow State Institute of International Relations (MGIMO), which approachesa rate of 3%. It is also important to pay attention to the low level of trust management income in 2014, which is 4% at an inflation rate of 11.4%.[9] Incontrast, in 2008 most funds earned incomes exceeding inflation. The data table reveals that universities spend much less on trust management fees, management company remuneration, and general and administrative costs than prescribed by law.

It seems to be impossible to identify any systemic approach behind assessing university endowment income (Tables 2 and 3). In addition, donations are obviously inconsistent, which makes it difficult to plan spending.

A big difference between Russian and Western endowment funds is that Russian funds use simple spending rules, either spending all current income (net of endowment management fees) or deciding on an appropriate rate each year. In the latter case, decisions on endowment spending rates and policies are often made by the board of trus-

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6 http://web.mit.edu/

7 James Tobin, who won Nobel Prize in Economics in 1981, managed Yale's endowment for many years.

8 Federal Law No. 265-FZ (rev. 07/23/2013)"On the Procedure for Endowment Creating and Spending by Nonprofit Organizations", dated 30 December 2006.

9 http://www.cbr.ru/

Table 1. **Interpretation of the main concepts related to endowment spending in Russian legislation**

Endowment income	Income from endowment property trust management, as well as part of endowment property as such (no more than 10%), transferred to beneficiary
Income from endowment property trust management	Increase in the value of net assets as a result of endowment property trust management over an accounting period
Trust manage-mentfees; general and administrative costs	Endowment fund incurs trust management fees as well as general and administrative costs prior to the distribution of endowment income. Income from endowment property trust management is used to indemnify for losses associated with trust management, such as expenses on mandatory annual financial statement audits incurred by the management company. Where this income is not enough to cover for such losses, endowment income may be used (no more than 1%). Remuneration to the management company is paid from endowment property trust management income (no more than 10%). No more than 15% of endowment property trust management income or 10% of endowment income may be used to pay for general and administrative costs.
Transfer of endowment income to beneficiary	Endowment fund does not have to use all income from endowment property trust management for operating costs and transfer of endowment income to beneficiary. However, at least 50% of such income should be spent every two subsequent years.
Endowment spending	Endowment income should serve purpose sstipulated in company's charter, donation agreement, last will and testament, or by the board of trustees. Endowment income shall be spent pursuant to the financial plan of the endowment fund.
Financial accounting	Expenses of endowment beneficiary financed from endowment income, as well as expenses financed from other sources, are subject to separate accounting. Financial statements of endowment beneficiary are subject to mandatory annual audits in terms of endowment spending, if financing of this beneficiary from endowment income exceeds 5 mln rubles in an accounting period.

tees or specially created committees. It is currently too early to discuss the endowment spending methods that are being widely applied abroad and that are based on spending rate, inflation, or average market value. Clearly, the financial managers of Russian universities are not familiar with the latest endowment spending strategies.

So, which activities and structural units of universities are financed from endowment income first and foremost? Table 4 presents the major endowment spending policies identified upon analyzing some of the institutions.

Maintenance of physical resources (especially sports facilities and dormitories) and student support (scholarships, student projects, stu-

Table 2. **Financial indicators of endowment funds in 2014**

№	Beneficiary	Netassetvalueasof 12/31/2014, rubles	Income, rubles	Donations, rubles	Re-turn,%	Payouts, rubles	University budget*, rubles	Payments to the budget,%	Generalandadminis-trativecosts, rubles	Management trust fee, rubles	Management company remuneration, rubles
1	MGIMO	1,262,000,000	47,000,000	118,000,000	5.5	80,000,000	2,850,133,000	2.81	N/A	N/A	N/A
2	European University at Saint-Petersburg	1,253,674,313	10,871,692	68,657,000	1.39	67,117,128	381,039,300	17.61	3,260,000	824,546	716,002
3	Saint-Petersburg State University	1,040,360,714	8,829,112	14,855,634	0.84	35,086,391	12,846,124,600	0.27	1,306,900	89,363	357,452
4	New Economic School	329,678,000	N/A	120,000	N/A	28,250,000	442,354,200	6.39	N/A	N/A	N/A
5	North-Eastern Federal University	152,340,023	4,161,232	51,056,610	4.67	4,581,869	5,573,686,500	0.08	571,580	N/A	27,100
6	HSE	92,700,000	2,250,000	55,000,000	3.8	6,130,000	14,962,023,100	0.04	1,500,000	13,700	118,600
7	National University of Science and Technology	68,097,787	1,827,376	32,904,182	4.7	956,090	6,188,513,000	0.02	100,000	28,261	182,737
8	Ural State University	49,889,195	834,081	18,755,551	3.4	1,277,705	8,640,200,000	0.01	36,405	0.00	42,456
9	Tomsk Polytechnic University	16,856,000	527,000	4,926,000	4.42	485,000	6,633,059,200	0.01	291,000	0.00	42,000
10	Southern Federal University	14,566,095	903,336	1,690,000	6.29	0.00	5,920,777,900	0	N/A	N/A	N/A
11	Tomsk State University	10,115,833	485,000	3,798,000	4.31	295,378	5,034,803,800	0.01	N/A	N/A	14,500
12	Peter the Great St. Petersburg Polytechnic University	8,990,067	268,117	358,100	6.94	184,552	7,755,290,200	0.002	424,072	24,721	462,359

* http://indicators.miccedu.ru/monitoring/

Table 3. **Financial indicators of endowment funds in 2012–2013, rubles**

№	Beneficiary	2013				2012			
		Net asset value as of 31 December	Income	Donations	Payouts	Net asset value as of 31 December	Income	Donations	Payouts
1	MGIMO	1,205,000,000	89,300,000	68,200,000	30,000,000	1,091,000,000	78,000,000	221,800,000	45,000,000
2	EUSP	1,213,052,748	96,702,000	97,000,000	39,525,000	831,353,186	67,957,778	62,087,830	18,207,024
3	SPBSU	1,054,180,000	79,120,000	25,880,000	63,508,708	1,012,750,000	63,410,000	281,810,000	3,779,665
4	HSE	43,135,000	2,400,000	0	0	40,700,000	2,800,000	0	0
5	MISIS	34,396,515	689,890	28,360,000	382,725	5,772,831	71,056	2,265,235	0
6	TPU	11,926,000	915,000	1,784,000	915,000	10,146,000	762,000	2,483,000	701,000
7	TSU	6,317,827	474,065	1,313,091	450,000	5,051,319	442,741	484,800	65,000

http://vo.hse.ru/en/

Table 4. **Endowment spending policies**

	Students	Academic staff	Physical resources	Visiting professors from abroad	Library	Research	Structural units
Financial University*	✓	✓	✓	✓			
MISIS	✓		✓				
HSE			✓		✓		
MGIMO	✓	✓	✓	✓	✓	✓	✓
SPBSU	✓	✓	✓				
TPU			✓		✓		✓
TSU	✓						

* Financial University under the Government of the Russian Federation.

dent mobility, etc.) are the most popular endowment spending categories, while research is financed least of all.

As we can see, Russian universities have not yet come to grip with the endowment spending methods widely recognized abroad, opting for simplified solutions as thus lagging behind modern management technologies.

Recommendations for endowment management in Russia

Let us consider the potential efficiency of universally recognized endowment spending methods for the case of HSE. We will analyze the application of spending rules through the example of HSE's Endowment Fund and simulate financial indicators for years 2008–2014 on the assumption that annual return, trust managemen tfees, management company remuneration, and general and administrative costs remain unchanged.

Table 5 demonstrates financial indicators for the HSE Endowment Fund.

The HSE Endowment Fund determines the endowment-spending rate every year. Endowment income was reinvestedin 2008–2013, and the aggregate income of 6.1 mln rubles was distributed to the HSE in 2014. The endowment amounted to 67.5 mln rubles at the end of 2014.

If the Fund had spent all current income instead, its endowment would have been 45.1 mln rubles (see Table 6) with inconsistent payouts from year to year (0–4.5 mln rubles), provided that annual return, trust management fees, management company remuneration, and general and administrative costs remained the same.

In order to use the method based on the value of net assets, we'll define the maximum spending rate as returns minus costs and inflation (Table 7).

Table 5. **HSE Endowment Fund financial indicators in 2008–2014***

	2014	2013	2012	2011	2010	2009	2008
Beginning market value (mln rubles)	43.1	40.7	38.0	35.4	30.7	25.6	26.0
Trust management income (mln rubles)	2.0	2.4	2.8	2.6	4.7	5.1	– 0.4
Annual return (%)	3.8	5.9	7.1	7.3	15.3	20.0	–1.5
Inflation rate in Russia (%)*	11.4	6.5	6.6	6.1	8.8	8.8	13.3
Costs associated with trust management and remuneration to the management company, as well as general and administrative costs (%)**	3.7	0.7	0.5	1.1	1.6	2.3	0
Costs (mln rubles)	1.6	0.3	0.3	0.4	0.6	0.6	0
Payouts (mln rubles)	6.1	0	0	0	0	0	0
Ending market value (mln rubles)	67.5	43.1	40.7	38.0	35.4	30.7	25.6

Note: IIndicators are hereinafter sorted from the current period back to earlier periodsaccording to the international practice of presenting endowment financial indicators.

* Inflation data was taken from the Official Journal of the Central Bank of the Russian Federation.

** Here and elsewhere this is referred to as “costs”.

Table 6. **Spending all current income**

Indicator	2014	2013	2012	2011	2010	2009	2008
Beginning market value (mln rubles)	15.1	16.0	17.1	18.2	21.1	25.6	26
Annual return (%)	3.8	5.9	7.1	7.3	15.3	20	–1.5
Trust management income (mln rubles)	0.6	0.9	1.2	1.3	3.2	5.1	–0.4
Costs (%)	3.7	0.7	0.5	1.1	1.6	2.3	0
Costs (mln rubles)	0.6	0.1	0.1	0.2	0.3	0.6	0
Payouts(mln rubles)	0.0	0.8	1.1	1.1	2.9	4.5	0
Donations(mln rubles)	30.0	0.0	0.0	0.0	0.0	0.0	0.0
Ending market value (mln rubles)	45.1	15.1	16.0	17.1	18.2	21.1	25.6

Table 7. **Maximum spending rate,%**

	2014	2013	2012	2011	2010	2009	2008
Annual return (%)	3.8	5.9	7.1	7.3	15.3	20	–1.5
Costs (%)	3.7	0.7	0.5	1.1	1.6	2.3	0
Inflation rate in Russia (%)	11.4	6.5	6.6	6.1	8.8	8.8	13.3
Maximum spending rate (mln rubles)	–11.3	–1.3	0	0.1	4.9	8.9	–14.8

Table 8. **"Five-percent rule"**

	2014	2013	2012	2011	2010	2009	2008
Beginning market value (mln rubles)	19.8	20.9	21.9	23.1	24.3	25.6	26
Annual return (%)	3.8	5.9	7.1	7.3	15.3	20	–1.5
Trust management income (mln rubles)	0.8	1.2	1.6	1.7	3.7	5.1	–0.4
Costs (%)	3.7	0.7	0.5	1.1	1.6	2.3	0
Costs (mln rubles)	0.8	0.1	0.1	0.3	0.4	0.6	25.6
Payouts (mln rubles)	1.0	1.0	1.1	1.2	1.2	1.3	0
Donations (mln rubles)	30.0	0.0	0.0	0.0	0.0	0.0	0.0
Ending market value (mln rubles)	48.8	19.8	20.8	21.9	23.1	24.3	25.6

Table 9. **Three-percent spending rate**

Indicator	2014	2013	2012	2011	2010	2009	2008
Beginning market value (mln rubles)	22.0	22.7	23.4	24.1	24.8	25.6	26
Annual return (%)	3.8	5.9	7.1	7.3	15.3	20	–1.5
Trust management income (mln rubles)	0.9	1.3	1.7	1.8	3.8	5.1	–0.4
Costs (%)	3.7	0.7	0.5	1.1	1.6	2.3	0
Costs (mln rubles)	0.8	0.2	0.1	0.3	0.4	0.6	25.6
Payouts (mln rubles)	0.7	0.7	0.7	0.7	0.7	0.8	0.8
Donations (mln rubles)	30.0	0.0	0.0	0.0	0.0	0.0	0.0
Ending market value (mln rubles)	51.3	22.0	22.7	23.4	24.1	24.8	25.6

Due to high levels of inflation, the spending rateis incomparable to the foreign rates of 4–5%, even if we discard 2008 and 2014 as particularly difficult years. Yet, we will still try applying the five-percent rule to the HSE endowment (Table 8).

The estimation demonstrates that the "five-percentrule" is more efficient for capital preservation (48.8 mln rubles) and for an even distribution of payouts (1–1.3 mln rubles) than using all current income.

Table 9 shows estimates for a spending rate of 3%. Based on an estimation of the maximum spending rate, wecan say that a 3% spending rate fits the Russian context better than a 5% rate. The ending market value would have been 51.3 mln rubles in 2014, with annual payouts of 0.7–0.8 mln rubles.

When we used the moving average method with a 3% spending rate and market value over a 5-year period, we obtained a result very close to that when we only considered the last year's mar-

Table 10. **Moving average**

Indicator	2014	2013	2012	2011	2010	2009	2008
Beginning market value (mln rubles)	21.8	22.6	23.3	24.1	24.8	25.6	26
Annual return (%)	3.8	5.9	7.1	7.3	15.3	20	–1.5
Trust management income (mln rubles)	0.8	1.3	1.7	1.8	3.8	5.1	–0.4
Costs (%)	3.7	0.7	0.5	1.1	1.6	2.3	0
Costs (mln rubles)	0.8	0.2	0.1	0.3	0.4	0.6	25.6
Payouts (mln rubles)	0.7	0.7	0.7	0.8	0.8	0.8	0.8
Donations (mln rubles)	30.0	0.0	0.0	0.0	0.0	0.0	0.0
Ending market value (mln rubles)	51.1	21.8	22.6	23.3	24.1	24.8	25.6

ket value: the ending market value would have been 51.1 mln rubles in 2014, with annual payouts at the same level of 0.7–0.8 mln rubles (Table 10).

The α-β approach cannot be applied in Russian practice due to some legal limitations, namely the impossibility of creating a stabilization fund within an endowment.

Inflation-based methods are inapplicable to the HSE Endowment Fund, as they resort to previous spending experiences. Calculations will be inaccurate because endowment income was reinvested for a long time and accumulated the income of previous periods to be distributed to the beneficiary in 2014. Likewise, hybrid methods attributing at least 60% to inflation cannot be applied either.

Having compared income distribution by the HSE Endowment Fund to the potential outcomes of other methods, we can say that the current policyis better than the preservation principle, while the methods based on net asset value could have provided intergenerational equity, with income distributed in favor of present and future generations evenly each year. Capital preservation surely results in the growth of the Endowment Fund. However, the money is lost due to the crisis and endowing the better part of capital in rubles, so the viability of this choice is questioned. A policy like this could be profitable in a stable economy, but is fraught with missed opportunities in case of sharp economic ups and downs.

Conclusion

During the evolution of endowment funds in Russia, the endowment community first learned how to create funds, then how to manage them, and now actively investigates fundraising strategies. So far, many universities have been giving little attention to efficient endowment spending. Chances are that this will take place during the next stage of endowment community development in Russia.

Meanwhile, endowment-spending rules have been established and widely applied in international practice, and researchers in economics and education have actively investigated spending patterns over the last fifty years.

Western universities have been applying market-value-based, inflation-based, and hybrid methods for endowment spending. However, these universally recognized spending rules have not yet made their way to Russia. More importantly, the existing legislative frame work and the inconsistency of spending practices make introducing such rules in Russia even more challenging. Russian endowment funds instead decide on an appropriate rate each year or, alternatively, to use all current income net of endowment management fees.

Balancing future and current payouts to ensure intergenerational equity has not yet become the basis for calculating annual spending. However, our analysis of the asset-value-based method proves that even now Russian universities could apply itand thus provide intergenerational equity and consistent payouts from year to year.

Financial managers of universities need to master fine financial tools all owing that not only ensure stability (Russian endowments are still too small to provide this), but also support uncovered activities. Under existing circumstances, federal financing for fundamental and applied research is decreasing, developing human resources and retaining topnotch faculty is becomingdifficult, and academic mobility– including theshare of foreign students and visiting professors— is likely to decline. This means that universities have to support these activities through available growth and development points. In times of crisis, foreign countries try to expand education investment opportunities for students, families, and businesses, which is not the case with the Russian education system. Moreover, government support in Russia is only focused on specific types of activities and on powerful universities. Even the leading institutions find it difficult to develop human resources, ensure high rates of student mobility, and so forth. As a new financial instrument, endowment funds could help to overcome these difficulties, but even the funds of the top-ranked universities choose to rely upon simple spending rules, which lead them to preserve capital by reducing operating costs. This choice may be described as lopsided, as it curtails the opportunity for buffering against emerging risks. An analysis of Western endowments shows that they assume the function of offsetting external environment risk. The funds of major foreign universities incurred substantial losses due to the financial crisis, but nevertheless these stabilization fundswere used by universities to finance their growth points. In no way does this mean that endowment income and endowment “body” should be used to the maximum extent possible. But it does express the fact that the need to balance present and future financing, as articulated by Tobin, is one of the most pressing issues today, and we can clearly see from the HSE case that no optimal solution has been found thus far.

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