INVESTING IN FREE UNIVERSAL CHILDCARE IN THE REPUBLIC OF NORTH MACEDONIA

Analysis of Costs, Short-Term Employment Effects and Fiscal Revenue

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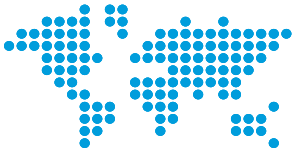

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EXECUTIVE SUMMARY

This report examines the case for investing in free universal childcare services in order to: i) reduce gender inequality in employment, labour market activity and earnings; ii) to promote higher human capital through greater enrolment of children in early childhood learning and development; and iii) to ensure equal access to all children in formal childcare as to foster the life chances and well-being of young children. The study estimates the employment-generating and fiscal effects of investing in universal childcare in the Republic of North Macedonia. It calculates the total annual costs of investing in childcare services that would increase the enrolment (coverage) rate of the children in formal childcare services to different target levels. The Government has recently pledged to increase the enrolment rate of the children aged 3-6 from 40% to 50%. In addition, this study experiments with several options for the target enrolment rate, up to the full coverage, using parameters relevant to the Macedonian context.

Provision of childcare in North Macedonia is inadequate, relying mainly on mothers' informal care time and with unequal access to early childcare and education services despite relatively low prices. Quality of childcare services is also unequal. This impairs children's development as shown by numerous studies (Huston et al., 2015). Children from disadvantaged backgrounds tend to benefit most from high quality formal childcare, from an early age, but are least likely to attend such facilities. Therefore developing accessible, affordable childcare of high quality is essential to achieving multiple policy goals: it increases and equalises the life chances of all children and thus contributes to social mobility; it improves employment prospects of mothers by freeing their time and budget constraints for childcare responsibilities; it reduces poverty by enabling all families to acquire economic resources independently; it improves employment prospects in the economy overall by creating jobs directly and indirectly; it generates tax revenue in the long term for government to recoup the original investment and spend on other projects. As such it contributes to the Sustainable Development Goals (SDG) of gender equality, high quality education, well-being and health and reduced poverty.

Calculations entail different scenarios that vary by quality indicators and children's enrolment. As quality of childcare provision is paramount to offer the best chances for children, we prioritise the expansion based on a high quality scenario that is gradually extended to all children. Therefore three main scenarios are examined in more detail corresponding to plausible policy choices. The main report offers comparison with other scenarios of various combinations of childcare quality and coverage.

Scenario 'SDG current': increased enrolment to reach SDG potential target of 50% of children aged 6 months to 2 years and 100% of children aged 3-5 (following ILO, 2018) but based on current quality parameters (staff numbers, pay and qualification). This would only serve as a benchmark for the other two scenarios as quality levels would not be optimal and so should not be pursued.

Scenario 'SDG high': increased enrolment to SDG targets but with high quality parameters including: low child/staff ratios and group size, at levels of regulatory standards; salary of pedagogues at level of teaching professionals; greater proportion of pedagogues in the child/staff ratio, about 48% on average, and nursing staff qualified with 2 years of post-secondary training

Scenario 'Universal high': universal enrolment with the same high quality parameters as the previous scenario.

TABLE 1

Total gross annual investment in childcare services by scenario retained

Scenarios	SDG current	SDG high	Universal high
No. children 6m-2y covered	50%	50%	100%
No. children 3-5y covered	100%	100%	100%
Hours p.w. per child	50	50	50
Child/staff ratio	Current (12:1)	Statut. (4:1 for 0-2; 8:1 for 3-5)	Statut. (4:1 for 0-2; 8:1 for 3-5)
Pay level (MKD per month)	Current (pedagogues 31,284; nursing 23,581)	Teacher (pedagogues 36,531; nursing 30,619)	Teacher (pedagogues 36,531; nursing 30,619)
Qualification levels	Current (pedagogues tertiary; nursing secondary)	High (pedagogues tertiary; nursing 2y post-secondary)	High (pedagogues tertiary; nursing 2y post-secondary)
Total gross annual cost (MKD mil.)	8,101	14,139	19,579
(in % of GDP)	1.3%	2.3%	3.2%
Cost per child p.a. (MKD)	82,943	144,760	200,449
(% average earnings)	19.7%	34.4%	37.0%

Source: authors' calculations

In order to calculate the total annual gross investment of childcare provision in each scenario we assume the following constant parameters: centre-based childcare services only with 120 children per facility; children enrolled for free for a maximum of 50 hour per week, 48 weeks per annum; 40 working hours per week (52 weeks per year) paid for all staff in childcare centres (with provision for sickness and holiday replacement and based on 35 hours per week of contact with children per childcare staff member); a fixed number of support staff per facility (6 full-time equivalent posts across management, admin and cooking/cleaning/technical support functions); overhead costs fixed at current levels per facility (i.e. do not vary with number and staff pay levels). Training costs are based on cost of four years tertiary education pro-rata and annualised over a thirty years depreciation period. Construction costs are fixed per facility and also annualised as part of the overhead annual costs equivalent to a mortgage repayment/rent bill of about 25% of the overhead costs, following the UK assumption (De Henau, 2017a).

Increasing the quality and the quantity of childcare provision requires a large upfront annual investment – up to 3.2% of GDP in the universal high-quality scenario (Table 1) – but it will also have large employment effects which in turn will reduce the net funding requirement that needs to be found. It can also be recouped over a few years from reducing the child-related employment penalty faced by mothers.

TABLE 2

Employment effects of childcare investment by scenario retained

Scenarios	SDG current	SDG high	Universal high
Employment creation (FTE)			
Nursing staff	7,783	16,600	26,456
Teaching staff	4,863	7,842	8,938
Other staff in childcare	4,884	4,884	6,294
Other sectors	6,509	11,398	15,795
Total	**24,039**	**40,725**	**57,483**
% pts change in employment rates			
All	1.7%	2.8%	4.0%
Women	2.6%	4.4%	6.2%
% pts change in gender employment gap	-1.9%	-3.1%	-4.4%

Source: authors' calculations

Employment rates can be significantly increased, especially for women, as a result of the combined direct, indirect and induced job creation: not only direct employment of childcare and support staff will be created, industries supplying the childcare industry will also recruit more staff to honour the increased demand of their products; and all these new jobs will mean higher earnings to households can spend in the economy, inducing further employment creation. Overall, our estimations place the total job creation at 24,000, 41,000 and 57,000 in each scenario respectively, three quarters of which would go to women assuming current gender industrial segregation (Table 2). This means the employment rate of women would increase by between 2.6 and 6.2 percentage points. In the high-quality universal scenario, the gender employment gap would be reduced by more than a fifth from 20.2% to 15.8% (among the 15-64y).

With increased employment and earnings come increased fiscal revenue from income tax, social security contributions and expenditure (consumption) taxes, which would almost halve the net annual funding requirement of the investment (Table 3). For example, in the most generous scenario of universal enrolment and high quality provision, the annual net funding requirement is 1.6% of GDP for a gross investment of 3.2% of GDP. Effects on aggregate demand (GDP) are also shown in Table 3 for illustration: the most generous scenario entails a GDP that is 5.8% higher than it would be had the investment in childcare not taken place, a multiplier of 1.81. This compares to an increase in GDP of 3.6% following an equivalent investment in construction (a multiplier of only 1.2).

Moreover results show that the investment in childcare can also be self-funded over the years. We calculate a theoretical fiscal break-even point, based on longitudinal labour supply effects of mothers closing their lifetime employment and earning gap following such generous childcare offer. In North Macedonia, the fiscal return on investment based on this measure is likely to overcome the total cost of childcare for a typical mother of two children on average earnings. A typical mother of two benefitting from 11 years of free childcare (5.5 years for each child) would 'repay' the original investment after between 7 and 14 years of full-time employment on average earnings depending on the scenario retained.

TABLE 3

Employment and fiscal effects of childcare investment by scenario retained

Scenarios	SDG current	SDG high	Universal high
			(MKD mil. unless otherwise specified)
Gross annual cost	8,101	14,139	19,579
(in % of GDP)	1.3%	2.3%	3.2%
Direct tax revenue	2,553	5,152	7,216
Indirect tax revenue	813	1,708	2,404
Net funding gap	**4,735**	**7,280**	**9,960**
(in % of GDP)	0.8%	1.2%	1.6%
% self-funding	42%	49%	49%
No. years to break even (2 children)	7.29	12.72	13.67
% increase in GDP	2.4%	4.2%	5.8%

Source: authors' calculations

These results show that public investment in free universal childcare provision of high quality is not only beneficial to children and their parents, and to society more generally, it is also self-funding without having to increase taxation. Improvement in children's social outcomes will also materialise in accrued fiscal benefits in the long-term. Therefore, because childcare provision is an investment in the social infrastructure of a country it should be seen as a macro-economic policy in its own right, which creates new and promising avenues to develop a sustainable industrial strategy fit for the challenges and opportunities of the 21st Century.