

## Supporting Document 3 – Examples of Self-Financing Cost-Rental Models

In this document, we explore different financing scenarios for a theoretical public housing complex of 100 units. This complex will be cost-neutral based on a mean rent of €1,000 per month, or €100,000 total monthly rent for the whole development.

The following scenarios<sup>1</sup> are based on a number of assumptions. The year one, or initial, construction costs of each unit is €250,000 so the construction cost of the entire complex is €25 million. Alongside the construction cost of each unit, there is an additional €2,000 each year per unit for ongoing costs<sup>2</sup>—annual maintenance for each unit is €800; annual administration expenditure is €400 per unit; and an annual renewal fee is set at €800 per unit, collecting €25,000 for renewal after 25 years. So, based on these construction and maintenance assumptions, the public housing development is potentially cost neutral after 25 years by collecting a mean rent of €1,000 per unit per month.

The median disposable household income (MDHI) is assumed to be €40,000.<sup>3</sup> If a household's monthly affordable rent threshold is based on 30% of their disposable income, then it differs significantly for various households based on their income. For example, a low-income household in the 50% MDHI category can afford €6,000 each year on rent, or €500 per month. A middle-income household, in order for rent to be affordable in relation to income, can afford €1,000 per month.

The market rent is assumed to be constant at €1,400 per month in all scenarios.

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<sup>1</sup> These scenarios owe a debt of gratitude to the work of Saoirse Gowan and Ryan Cooper in developing a position paper on public housing in the US. See Saoirse Gowan and Ryan Cooper, 'Social Housing in the United States' (Washington, DC: People's Policy Project, 5 April 2018), <https://www.peoplespolicyproject.org/2018/04/05/a-plan-to-solve-the-housing-crisis-through-social-housing/>.

<sup>2</sup> In 2016, annual level of maintenance expenditure was set at €1,106 per unit across each of the local authorities based on data published by the National Oversight and Audit Commission. Alongside this, the annual level of administration expenditure is set at €733 per unit across each of the local authorities. See Daniel O'Callaghan and Paul Kilkenny, 'Current and Capital Expenditure on Social Housing Delivery Mechanisms', Spending Review 2018 (Dublin: IGEES Unit, Department of Public Expenditure and Reform, July 2018).

<sup>3</sup> The nominal mean disposable household income was €43,552. Owner-occupied households had a nominal median household disposable income of €47,373 in 2019, compared with €38,558 for rented households. For the purpose of calculation with rounded number, the assumed MDHI is €40,000.

30% MDHI	€3,600	€300
40% MDHI	€4,800	€400
50% MDHI	€6,000	€500
60% MDHI	€7,200	€600
70% MDHI	€8,400	€700
80% MDHI	€9,600	€800
90% MDHI	€10,800	€900
100% MDHI	€12,000	€1,000
110% MDHI	€13,200	€1,100
120% MDHI	€14,400	€1,200
130% MDHI	€15,600	€1,300
140% MDHI	€16,800	€1,400
150% MDHI	€18,000	€1,500

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The following four scenarios demonstrate various self-financing models which could be utilised in this theoretical public housing development. For a housing development to be self-financing, the green areas (profits collected on rents above the cost of construction) must be equal to the red areas (losses due to rents being collected below the construction costs). The brown areas highlight profitable rents which have been foregone, while the blue areas are rents paid up to cost level.

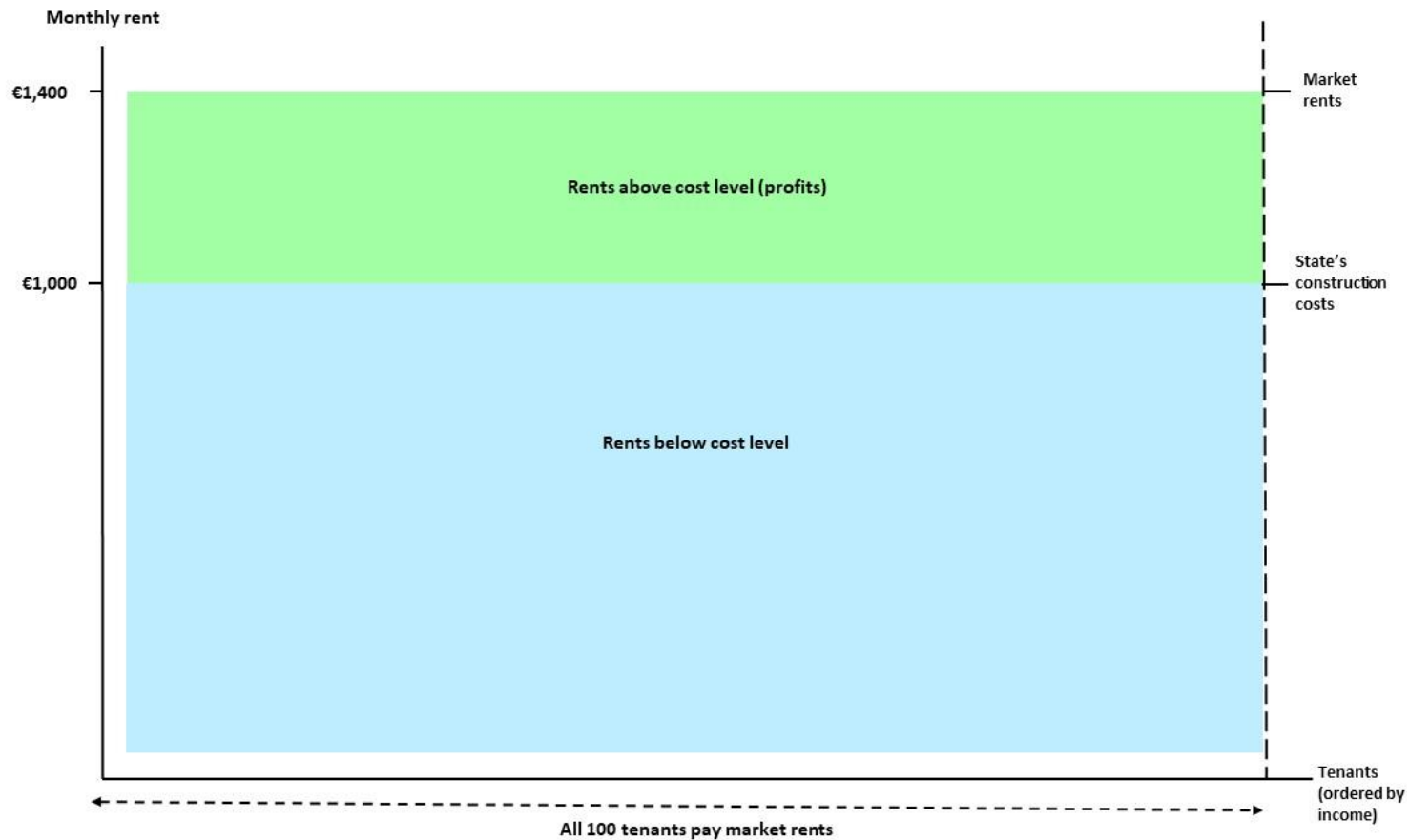


Figure 1 (see above) is a profit-maximising model of financing a public housing development. All of the units are rented out at market price, generating a profit of €40,000 per month or close to €500,000 each year. This profit could then be returned to the local authority and used to develop additional public housing schemes.

However, based on the rent affordability threshold (30% of disposable income), these rents are only affordable to household with a MDHI of 140%. A parallel system of rent subsidy would be required to ensure households can pay an affordable rent. There may be limited social benefit in this type of financing model but it would create downward pressure on other overpriced rentals in the private sector as it would be a supply-side constraint.

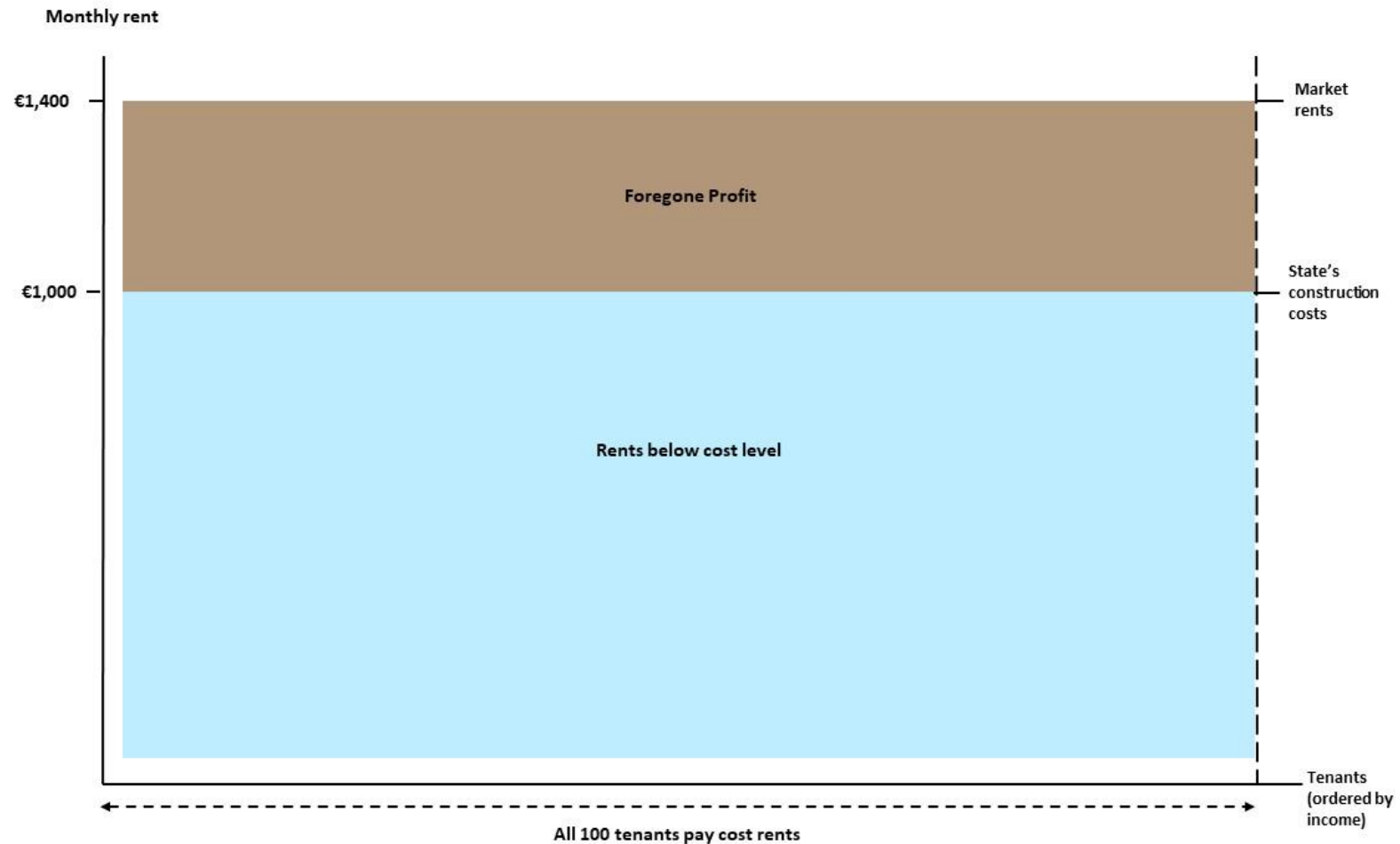
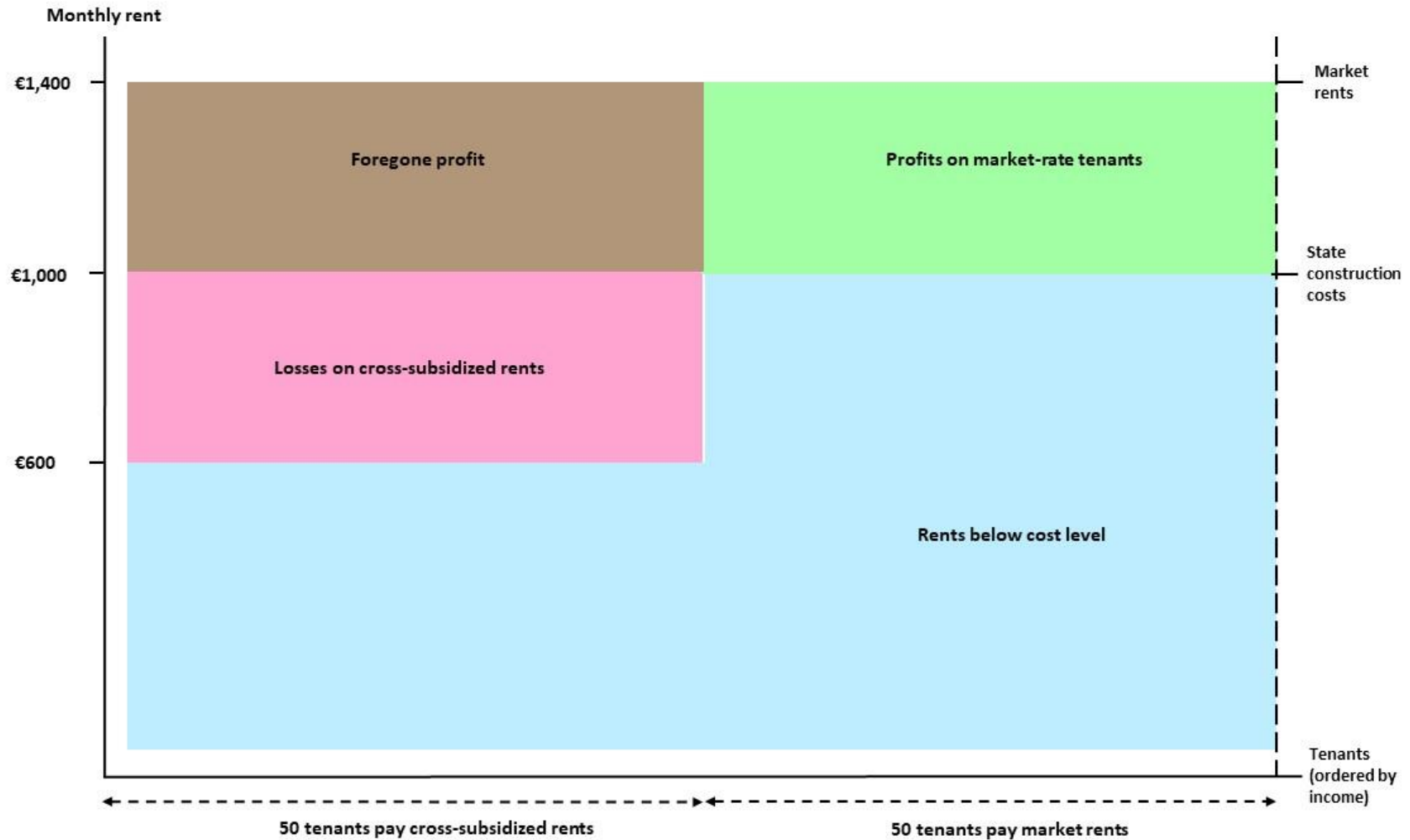


Figure 2 (see above) is a cost rental system based on the Vienna model of public housing. In this scenario, all tenants pay a cost rent of €1,000 per month with the State forgoing the profits up to the level of market rents. While making housing affordable to more households, only for those with a MDHI above 100% are the cost rents affordable. In this system, no household is subsidised further through the rental system. Rent subsidies or income support would be required to ensure all households are under the affordable rent threshold.

In Figure 3 (see below), a 50/50 cross-subsidiation model is displayed. In this financing scenario, 50 of the tenants pay the full market rent, affordable at 140% MDHI, and 50 tenants pay a monthly rent of €600, which is affordable for households at 60% MDHI. This cross-subsidiation model is too simple to have utility as there is a steep drop-off between the two income categories. However, this type of financing model can be refined further.



In figure 4 (see below) shows a cross-subsidisation model which is able to provide more affordable accommodation to low-income and middle-income households. A third of tenants pay market rents with a sixth paying rents at limited-profit rents of €1,200, affordable to households at 120% of MDHI.

A sixth of households pay deeply-subsidised rents of €400 per months, affordable to low-income households at 40% of MDHI, and a further sixth of tenants pay a subsidised rent of €600, affordable to those households at 60% of MDHI. The remaining sixth of households pay cost rents of €1,000. While this model is a slightly more complex, more households at different income categories are served ensuring a diverse community while maintaining a cost-neutral public housing venture by the the State. Compared to the previous model, the additional categories remove the steep decline between income categories.

