

How should we target social benefit and transfer programmes?

Policy implications for the targeting of Malaysia's cash transfer programmes

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This memo analyses the validity and the implications of the proposition "benefits that are not income-tested are badly targeted". Drawing on a rich body of international evidence to compare the targeting performance of income-testing to other targeting methods, the memo will show that non-income-tested benefits are not inherently badly targeted. Rather, the optimal targeting mechanism depends on a range of different factors, including country context, programme objectives, and other programme design choices. This memo concludes with a set of policy recommendations to improve welfare targeting in Malaysia.

1 Context and definitions

1.1 Targeting and income-testing

Benefit programmes need to decide who should receive benefits and how they will be identified.¹ To do this, programmes use a variety of targeting mechanisms, which can be classified under three broad categories (Barr, 2020):

- **Income-testing:** eligibility is decided based on a direct assessment of an individual or household monetary income. If a person falls below some predefined income threshold, that person will become eligible to receive benefits.
- **Indicator targeting:** eligibility is assessed on 'indicators' like age, health, or disabilities. Proxy-means testing, geographical targeting, and categorical targeting are examples of indicator targeting.
- **Self-targeting:** the social benefit is designed to encourage beneficiaries to self-select into participation. Examples of this include public works programmes ('workfare') – where a person is eligible for benefits if they perform some type of work or training – or subsidies for basic commodities like cooking oil (Barr, 2020).

¹see Appendix A. for a decision map for designing benefit programmes

1.2 'Bad' targeting and its consequences

A programme is 'badly targeted' when the targeting mechanism(s) used has a high degree of targeting errors at some given level of cost. In line with Devereux et al. (2017), this memo defines targeting errors as whether the programme reaches its intended beneficiaries, as opposed to whether it reaches 'deserving' or poor individuals. There are two types of targeting errors: *exclusion* and *inclusion* errors. Exclusion errors occur when eligible recipients do not receive the programme's benefits ('undercoverage'), while inclusion errors happen when benefits are accessed by ineligible recipients ('leakages') (Devereux et al., 2017, p. 170).

Inclusion errors inflate the costs of the programme by including non-eligible recipients, while exclusion errors undermine efficacy because intended beneficiaries are not being reached (Cheng, 2019; Devereux et al., 2017; Kidd and Athias, 2020). Consequently, 'bad' targeting makes programmes both less effective and resource-efficient.²

2 Income-testing vs non-income testing: lessons from international evidence

While income-testing is sometimes presumed to be accurate, evidence suggests that it still generates a substantial amount of errors (Devereux et al., 2017; Kidd and Athias, 2020). Figure 1 below summarises the targeting errors of different programmes using data from Devereux et al. (2017, p. 207-211). This data suggests income-testing is marginally better at reducing inclusion errors but it also generates more exclusion compared to other mechanisms.³ While this cannot be interpreted causally, Devereux et al. (2017)'s data is consistent with the literature in suggesting that income-testing is not a panacea for bad targeting (Bastagli et al., 2016; Cheng, 2019). In fact, part of the higher exclusion errors with income-testing (Figure 1) is due to its tendency to create barriers to access for those unable to comply with strict income verification procedures (Bastagli et al., 2016; Devereux et al., 2017).

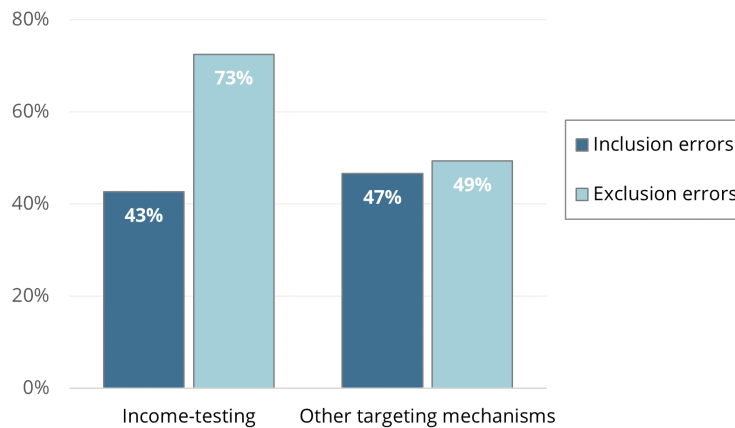
Beyond targeting errors, income-testing has other weaknesses too. It is costly and demands greater institutional capacity⁴ than simpler methods, making it difficult to implement in countries with weaker institutions (Barr, 2020; Devereux et al., 2017). Further, income-testing can produce strong work disincentives near the eligibility threshold, particularly when benefits are withdrawn sharply as income rises (Barr, 2020, p. 197-198 and Coady et al., 2021, p. 4). Lastly, income-testing raises questions about how well monetary

²For policy purposes, in many cases, inclusion errors are likely to be less problematic than exclusion errors, because programme 'undercoverage' has larger policy consequences than 'leakages' (Devereux et al., 2017).

³in fact, the difference in inclusion errors is likely not statistically significant

⁴Institutional capacity is defined as the capability and ability of institutions to implement policy goals (Institute for Transportation and Development Policy, 2016)

Figure 1: Targeting errors by type of targeting mechanism



Source: author's illustration based on data from Devereux et al. (2017, p.207-211)

Note: the 'income-tested' category includes mean-tested programmes; the 'other targeting mechanisms' category includes proxy-means testing, self-targeting and categorical targeting

income alone accurately predicts deprivation (Barr, 2020, p. 105-106).⁵

Of course, indicator and self-targeting have their own set of limitations. Indicator targeting is simple and better preserves work incentives – but it rarely meets the gold standard of having indicators that are highly correlated with deprivation, non-manipulable, and easy to observe (Barr, 2020, p. 199) As a result, in practice the performance of indicator targeting can vary substantially (AusAID, 2011). Similarly, self-targeting is cost-effective, but it is susceptible to excluding individuals who are unable to participate due to the programme's imposed conditions and/or social stigma (Barr, 2020).

In summary, the statement "non-income-tested benefits are badly targeted" is imprecise. Any single targeting mechanism is not ex-ante superior to another. Instead, the optimal targeting mechanism for a given programme depends on numerous factors. On top of being accurate, targeting mechanisms also need to minimise work disincentives and be aligned with a programme's overall goals (Devereux et al., 2017). Accordingly, this memo summarises three key factors to consider:

1. **Country context:** country characteristics play a large role in determining optimal targeting mechanisms. For example, the higher the country's institutional capacity, the better it can implement complex targeting mechanisms like income-testing. Simpler targeting mechanisms are often more feasible and effective in countries with lower institutional capacity. Likewise, non-income-tested programmes may be more successful in low-income countries with smaller tax bases and more widespread deprivation

⁵Discussing how accurately money income predicts poverty and deprivation, and how this affects income-testing is beyond the scope of this memo

(Barr, 2020, p. 198 and Devereux et al., 2017).

2. **Programme objectives:** programmes aimed at benefiting a well-defined group like old-age social pensions and/or child benefits may be suited for indicator targeting (on age) to reduce costs and improve coverage. Similarly, for benefit programmes whose main objective is to ensure as wide a coverage as quickly as possible – such as emergency cash transfers during natural disasters – strict income-testing is often detrimental to those goals (Cheng, 2022).
3. **Design choices:** good programme design and implementation can greatly improve targeting accuracy irrespective of the targeting method. For example, effective implementation can play an outsize role in improving performance (Coady et al., 2004; Devereux et al., 2017). Likewise, design choices like benefit taper rates or how simple application procedures are can mitigate many of income-testing’s limitations.

3 Implications for targeting welfare benefits in Malaysia

3.1 Malaysia’s country context and targeting problems

Malaysia’s flagship social benefit programme is *Sumbangan Tunai Rahmah (STR)*⁶, an income-tested unconditional cash transfer programme⁷ (Cheng, 2019; Ministry of Finance, 2022). Malaysia is an upper-middle-income country with relatively high institutional capacity (The World Bank, 2021). Worldwide Governance Indicators (WGI) data suggest that Malaysian is in the 81st and 72nd percentile for ‘government effectiveness’ and ‘regulatory quality’ respectively (Kaufmann and Kraay, 2022) (Figure 2). Being an upper-middle-income country means there is less concern of disincentives arising from a small tax base and widespread deprivation (Barr, 2020, p. 197-198). Likewise, relatively high institutional capacity suggests that Malaysia is able to administer complex targeting mechanisms. Despite this, data from Cheng (2022) and Khalid et al. (2018) suggest that the STR programme’s exclusion and inclusion errors are both as high as 33 per cent to 45 per cent (see Figure 3).

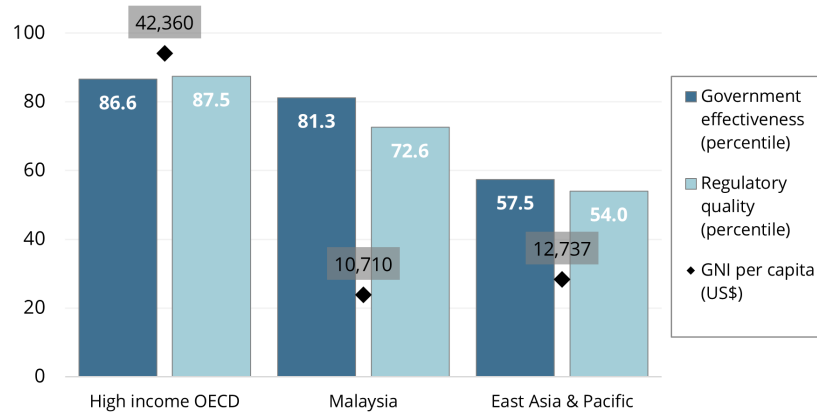
3.2 Policy proposals to improve targeting

The insights gathered from reviewing transfer programmes across the world can be applied to the Malaysian context. This memo highlights four main recommendations:

⁶Roughly translated as Compassionate Cash Contribution, the programme was newly renamed in 2023. Before 2023, it has undergone numerous name changes, including Bantuan Keluarga Malaysia (BKM), Bantuan Sara Hidup (BSH), and Bantuan Prihatian Nasional (BPN). Some of the cited literature will use these older names.

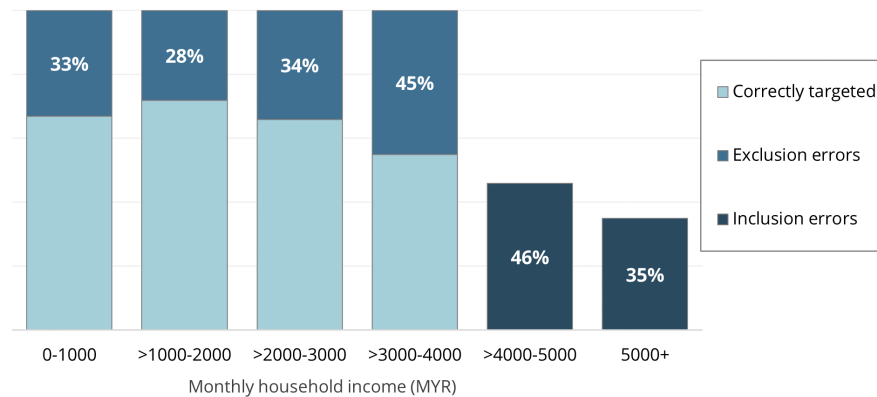
⁷Unconditional cash transfers refer to cash benefit programmes that do not require recipients to accomplish a certain action as a precondition for receiving benefits, e.g. visits to a healthcare practitioner

Figure 2: Malaysia: country characteristics



Source: author's illustration based on Kaufmann and Kraay (2022) and The World Bank (2022),

Figure 3: STR targeting errors by income level



Source: author's illustration based on data from Cheng (2019) and Khalid et al. (2018)

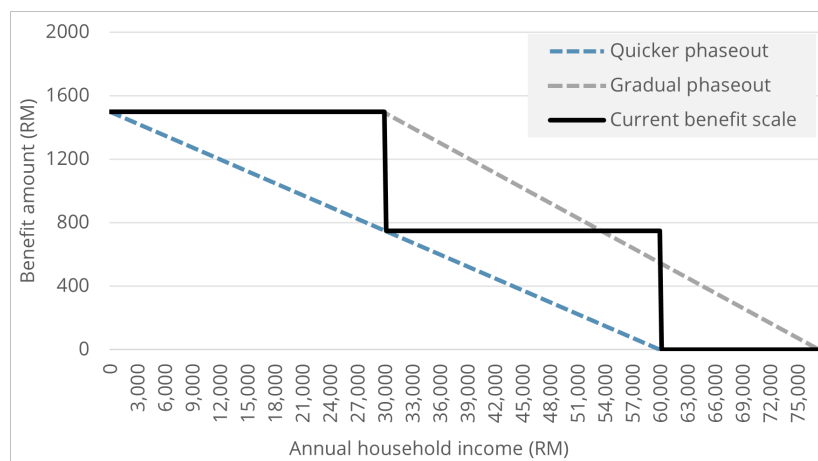
Note: MYR = Malaysian Ringgit. 2019 data for a sample of low-income households in Malaysia.

1. Improve STR work incentives by gradually tapering benefits: One weakness of income-testing is the work disincentives it can create for recipients close to the eligibility threshold (Altig et al., 2020; Barr, 2020; Coady et al., 2021). These disincentives are magnified by the STR programme's sharp cut-off (Barr, 2020, p. 200). This means that once a recipient passes the income threshold, the entire benefit is withdrawn, and any income gains are more than offset by the loss of benefits. As shown in Figure 4, the current STR benefit scale has benefit 'cliffs' for individuals earning an annual household income of RM30,000 and RM60,000.

Introducing a more gradual benefit taper rate can mitigate this. Figure 4 presents two potential fixes: a

quick phase-out (blue dashed line) and a gradual phase-out scenario (grey dashed line). Both feature gradual reductions in benefits that are smaller than income gains, helping to preserve work incentives at the margins. Back-of-the-envelope calculations using Malaysian household survey data suggest that moving from the current benefit scale to the 'quicker phase-out' scenario (Figure 4) can reduce programme costs by around 42 per cent – roughly RM1.2 billion (about £270 million). These savings can then be re-invested in strengthening programme implementation or redirected into a 'universal' categorical child benefit programme.

Figure 4: Preserving work incentives by removing benefit "cliffs"



Source: Author's illustration based on STR benefit information from the Ministry of Finance and Household Income and Basic Amenities survey data from the Department of Statistics, Malaysia (DOSM)

Note: Benefits are for a standard household with 2 children

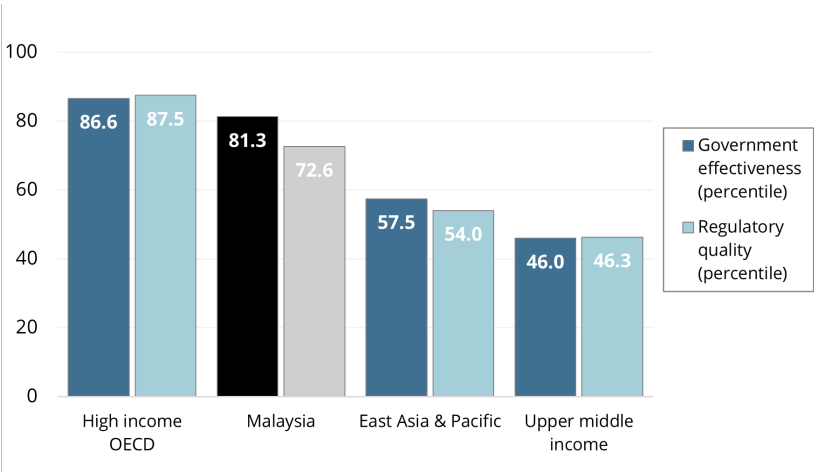
2. Combining targeting mechanisms: combining targeting methods can increase accuracy by 15 per cent per mechanism (Coady et al., 2004 and Devereux et al., 2017, p. 17). This presents opportunities for the STR programme to explore synergies between different methods to negate some limitations of income-testing. For instance, the STR programme can implement proxy-means testing (PMT) and/or geographical indicator targeting in more remote regions such as in Malaysian Borneo – where there are well-known challenges in delivering public services. Using PMT and/or geographical targeting can help reduce exclusion when income verification is difficult or impossible in an informal rural economy.

3. Reduce exclusion through reducing compliance costs and information asymmetries: Income-testing can create exclusion through higher compliance burdens that come with strict verification processes (Baekgaard et al., 2021). To this end, cutting through these barriers by making assistance more accessible can greatly reduce exclusion errors. This would entail streamlining STR's complicated administrative procedures and providing guidance in navigating application processes. Currently, STR applications require a complex set of

forms that are only available in one language, and limited help is provided for recipients who have difficulties understanding application procedures.

4. Strengthen institutional capacity further: While Malaysia has high institutional capacity, there is still a sizeable gap compared to high-income OECD countries (see Figure 5). International experience indicates that countries with better institutional capability are better able to effectively implement income-testing. This suggests that there is room for Malaysia to improve targeting effectiveness by strengthening institutional capabilities through investing in training and the adoption of digital technologies, which could lead to greater targeting efficacy.

Figure 5: Institutional quality in Malaysia versus international benchmarks



Source: Worldwide Governance Indicators (WGI), Kaufmann and Kraay (2022)

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Appendix

A. Benefit programme policy design decision map

Figure 6: Targeting and income-testing

