

From Evidence to Policy: Supporting Nepal's Trade integration Strategy

Policy Note 4

Assessment of the Impact of the Cash Incentive to Promote Export Diversification in Nepal

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Executive Summary

In 2010/2011, Nepal set up a cash incentive scheme for exporters aimed at reducing its trade deficit and vulnerability to external shocks, by promoting export growth and diversification for its firms. Under the cash incentive scheme, firms were eligible to receive 2, 3 or 4 % of their export value as an incentive conditional on exporting to countries other than India, and adding domestic value by 30, 50 or 80%. The scheme was modified with the budget announcement of 2013. First, the incentive value was reduced to 1 or 2 % of export value. Second, a fast track system was established for selected products specified under Nepal's National Trade Integration Strategy. The Trade and Competitiveness Global Practice has been partnering with the Government of Nepal to assess the impact of the cash incentive program on export growth and diversification. This note presents the main results of the analysis.

Making the support to firms' internationalization a policy priority is commendable Countries around the world, and many countries in the South Asia region have incentives in place to help firms become exporters and succeed in diversifying their export markets. There are many reasons why Governments may use public funds for these purposes. Information is crucial for exporting, and obtaining it is costly. Exporters need information about the specificities of selling to a particular destination (standards, market access conditions, etc), about consumer tastes in the foreign destination, or about pricing strategies. Obtaining this information is costly, but once it is obtained, it is difficult to exclude third parties from using it (it is 'non-excludable'). In addition, firms that enter export markets may be better positioned to increase productivity through reaping the benefits of scale, or through learning from increased competition and demanding foreign clients, and this may have spillovers to other firms in the country. Different Governments choose to support these efforts through different policy interventions. Nepal, or Bangladesh, for example choose to provide a cash incentive. Other countries focus on subsidizing the provision of information, or helping firms build their managerial or other capabilities needed for exporting.

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¹ To date, and to the best of our knowledge, there are no rigorous impact evaluation of the cash incentive schemes for exporters of the type that is applied in Nepal, and that is also applied in other countries of the South Asia region (e.g. in Bangladesh). Impact evaluations have focused on other type of internationalization support consisting of information provision, or of building firms capabilities needed for the export process (for results, see Cadot et al 2011). For a description of some key export promotion activities with positive impact see Policy Note 5 of this report.

But not all interventions designed to support firms' internationalization work, so, evaluating impact is crucial. The design and implementation of these interventions is necessarily an experimental process. This is why it is also important to (i) keep channels of communication with the private sector open, (ii) rigorously evaluate the impact of the interventions, and (iii) be ready to change the course of action if the interventions show no effect on the targeted variables.

The program is not reaching the firms it is meant to support. High fixed costs of filing, due to a lengthy and complex filing procedure, couple with limited resources and a first-come first-serve allocation mechanism have been impediments for exporters (and particularly for new exporters) to claim the incentive. In 2012, only 3.3% of eligible firms actually received the incentive. This increased to above 6% in 2013 and 14% in 2014, as more funds were made available, but it remained low: most firms exporting eligible products do not receive any incentive. And those that are receiving it tend to be substantially larger, and also tend to find it easier to receive it more than once. In fact, the conditional probability of receiving the incentive given that the firm had managed to receive it the year before was in the range of 50-70% (compared to the unconditional probability of 3-14%).

Some of the planned changes in the scheme introduced in 2013 revealed public-private dialogue. However, many of these changes have not been fully implemented. The fast-track system introduced in 2013, and by which, firms exporting priority products would not need to certify domestic value addition reflect the systematic feedback of the private sector on the complexity of proving value added content. On one hand, the changes reveal that communication channels between the private and the public sector exist and that feedback is incorporated into policymaking, which is commendable. On the other, both field-level interviews, and systematic data analysis suggest that the 'alleged' change was not fully implemented, or at least did not result in a reduction in the fixed costs of filing (in fact these have increased over time). The change involving the reduction in incentives' rates, however, did materialize, with median effective incentive rates having fallen from 2.9% to 2.1%.

Has the incentive had any effect on export growth and diversification?

The incentive does not seem to have had any effect on export growth or diversification. To answer the question, the note looks at export performance at different levels of aggregation: at the macro level, at the product level, and at the firm level.

At the aggregate level we find no conclusive evidence of the incentive program having affected export growth or diversification away from India. Instead, India appears to be growing as a destination market after the implementation of the incentive, likely due to the fact that during the period of analysis, India grew faster than the rest of the world, and therefore it increased demand for imports at a relative faster rate than the rest of the world did.

At the product level there are mixed patterns of diversification. Readymade garments, polyester yarn and carpets, three of the largest traded eligible products in terms of value for Nepal, display noticeable export growth; however, only half of all eligible products diversify away from India. Those products that did diversify away from India went to the United States, the Czech Republic, Turkey, Malaysia and Australia. In any case there is no evidence showing that when diversification was observed, it was **due to** the cash incentive scheme.

At the firm level there is no evidence showing a clear link between the effective incentive rates received and export performance, or the changes in the export incentive scheme and performance. There is some evidence that firms that received the incentive diversified both product and market offerings. However, these firms that consistently received the incentive are special in the first place – that is, they have unique characteristics, and their different performance is likely related to them: they tend to be larger than those that did not receive the incentive, for example. Once firm-specific characteristics are controlled for, we find no effect of either the change in the incentive scheme in 2013, that made the incentive less generous, or of the effective incentive rate, on export levels, growth and diversification patterns.

The main policy conclusion that emerges from this analysis is that the current incentive scheme needs to be revised. In the process of revision it is important to carefully consider what the main objective of the incentive is and why public support is needed. If, for example, the incentive aims at helping firms financing the informational costs at the beginning of the process (the so called ‘discovery costs’) it is important that the incentive targets new firms, or new export flows, rather than existing, well-established ones. In any case, the filing process needs to be streamlined so that the fixed costs a firm faces when filing for the incentive fall substantially, and smaller firms are better positioned to obtain it. This will also reduce the cost of administering the scheme for the government. More generally, resources that are currently committed to this export incentive scheme could be put to a better use to finance policy interventions that would help **a wider universe of** firms to be more competitive. An example is a reform to the tariff code that seems to penalize exporters that rely on imported intermediates. A second example is the streamlining of the duty-drawback system for exporters.

Introduction

Governments all over the world support firms' internationalization plans through different interventions. They do so in the understanding that entering and thriving in highly demanding export markets is crucial for gaining from economies of scale, but also from learning, leading to productivity gains that often spill over to the rest of the economy. Also, in small economies, reaping these gains from economies of scale through export market participation is crucial for growth and job creation

In 2010/11 the Government of Nepal introduced a cash incentive scheme to stimulate export growth and diversification away from India. The program's stated objectives included "enhancing exports, reducing the trade deficit and improving the balance of payments situation", and applied to exporters that, complying with a certain domestic value added threshold, exported to countries other than India (thus obtaining 'convertible currency'). Under this scheme, exports to countries other than India and containing more than 30, 50 or 80% of domestic value addition were entitled to an incentive that amounted to 2, 3 and 4% of the export value in fob terms.

In April 2013, the Government of Nepal modified the cash incentive scheme. This modification had two components. First, it reduced the subsidy to 1 and 2% rates from 1, 2 and 4% rates. Second, it introduced a fast-track for a number of products – mostly identified as priority products under Nepal's National Trade Integration Strategy – by which firms would not need to prove domestic value addition, but instead would be automatically eligible.

This note attempts to look at the overall performance of the mechanism and at the effects of its change in 2013. It examines the design and implementation of the incentive scheme as well as its impact on exports and diversification patterns in Nepal. On design and implementation, the note attempts to answer the following question: *is the incentive reaching the firms it is aiming at supporting?* And: *are there substantial fixed costs associated with filing the incentive and how have these been evolving over time?* On impact, the note attempts to answer the following question: *is the incentive scheme inducing an increase and diversification in exports that we would have not observed in its absence?* Of course, answering the latter question is challenging as we do not observe the counterfactual (what would have happened had the incentive scheme not been in place). Our approach goes in a *crescendo* of granularity. We start by comparing aggregate export trends of Nepal to India and to the rest of the world (excluding India) before and after the introduction of the incentive scheme in 2010/11 and the change in the scheme in 2013. Second, we examine the performance of exports at the product level, comparing growth and diversification patterns of eligible exportable products with those of ineligible ones (same products, but exported to India). Third, and relying on firm-level data on exports matched with data also at the firm-level on incentive claims we compare the export levels and diversification

performance of firms that receive the incentive with that of firms that don't and export eligible products. Fourth, we look at the effect of the change in the cash incentive mechanism of 2013, by comparing the growth and diversification patterns before and after the change for recipients and non-recipients of the incentive (through a difference in difference model). Finally, we look at the overall impact of the incentive rate on export growth, levels and diversification (through a fixed effects model).

The initiative of the Government of Nepal to evaluate the impact of this intervention goes in the right direction. Any policy intervention attempting to support firms in covering part of the 'discovery costs' associated with new export activities is subject to success or failure. The design and implementation of these initiatives is inevitably an experimental process, and not all interventions will pay off. This is why two elements are crucial. First, to keep channels of communication with the private sector, to better monitor and evaluate the functioning of the scheme. The changes in design introduced in 2013 seem to reflect that these channels were active. Second, that the interventions are subject to rigorous impact evaluations and that the course of action is altered in response to the results of these evaluations, if need be. The main messages that emerge from this note are key inputs to the stock of knowledge on which policy-making is based in Nepal.

The rest of the note is structured as follows. Section 2 discusses aspects of the design of the allocation mechanism of the incentive. Section 3 shows the impact of the incentive program from the aggregate level, at the product level and at the firm level.

1. Design of the Incentive

Background and changes to the scheme

The budget speech of June 2010 introduced a cash incentive scheme to exporters with the objectives of enhancing exports, reducing the trade deficit and improving the balance of payments. This scheme consisted of 1, 2 or 4 percent of the FOB export value rebate to exporters, paid to them through Nepal's National Rastra Bank on the condition of: (i) exporting to countries other than India, and (ii) adding 30, 50 or 80 percent of value added domestically.

Private sector feedback after the scheme had been in place for some time focused on the length and complexity of certifying domestic value addition.

Partly as a response to this feedback, the system was modified with the budget speech of June 2013. The Government of Nepal introduced a fast-track for priority products included in the NTIS that would not need, in principle to prove domestic value addition. In addition to this, the

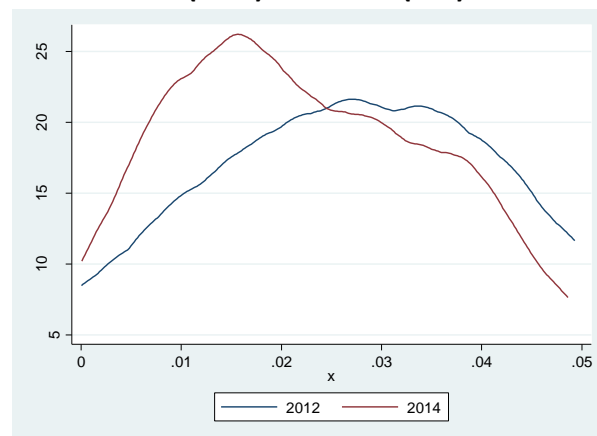
incentive tiers moved from 1, 2 and 4% to 1 and 2% of FOB export values, thus becoming *less* generous (see Figure 1).

If the scheme was effective, the introduction of the fast-track should have helped exporters, while the reduction in the incentive rates should have harmed them.

The fast-track system is unlikely to have affected the speed or ease with which incentives were received. Evidence suggests that (a) the fast-track has not been fully implemented yet, (b) the private sector interviewed for the preparation of this note did not perceive any changes in the procedures, and when it did, it was an increase in the process complexity, and (c) our estimates on the fixed costs of filing suggest an increase, rather than a reduction in these fixed costs when comparing the before and after of the budget announcement of 2013.

The reduction in the incentive rates, instead, did fall upon a substantial portion of recipients of the incentive. We calculated the effective incentive rate by taking the ratio of the incentive received by recipient firms to the export value of their eligible transactions, both for 2012 and 2014 (before and after the incentive scheme change), and plotted its distribution in Figure 1. Two messages emerge. (i) The distribution of effective incentive rates across firms did shift to the left, in other words, the incentive scheme got less generous.² (ii) A substantial portion of firms still receive effective incentive rates above 2%.³

Figure 1: Distribution of effective incentive rates in 2012 (blue) and 2014 (red)



Source: Authors' calculations based on Customs and NRB data

Implementation and Reach of the Incentive Scheme

The implementation and allocation design of the cash incentive scheme is crucial for the incentive to have any effect on firms' decisions. This is why, before assessing the impact on the recipients of the incentive, we need to answer the following question: *is the incentive reaching*

² We test the significance of this shift of the distribution using a Kolmogorov-Smirnov test of stochastic dominance. Results suggest that the 2012 distribution is different from that of 2014 at the 15% significance level. The small number of firms that receive the incentive, that constitute the basis of the distributions plotted in Figure 1 needs to be taken into account when considering the acceptable threshold for significance (Wooldridge xx). The comparison of position indicators is also revealing of a displacement of the distribution to the left after the incentive change. The first quartile of the distribution in 2012 was at 0.014, while it was at 0.008 in 2014. The median was at 0.029 in 2012 and at 0.021 in 2014, while the third quartile was at 0.04 in 2012 and 0.034 in 2014.

³ This may be reflecting data reporting mistakes.

the firms it intends to be supporting? If the answer is ‘no’ as it seems to be in this case, the natural follow up question is *why?*

Not all eligible transactions received the cash incentive. When measured in export values, only the 35% of the value of eligible transactions received the cash incentive in 2014. This percentage increased from 13.6% and 20.5% in 2012 and 2013 (see **Error! Reference source not found.**).

**Table 1. Decomposition of Eligible Transactions
(FYs 2012-2014) (Values in \$ Millions)**

Fiscal Year	Claimed		Non-Claimed	
	Export Value	Change in Export Value	Export Value	Change in Export Value
2012	\$27.2		\$173.2	
2013	\$41.2	51.5%	\$160.0	-7.6%
2014	\$75.0	82.0%	\$143.0	-10.6%

Source: Author calculation based on data from Nepal’s customs office and Nepal’s Rastra Bank.

Why is take up so low? The reason for this low take up of the program is threefold: first, the resources devoted to the cash incentive fund are disbursed on a first-come first-serve basis, and they are limited, although increasing over the period (by 51.5% in 2013 and by 82% in 2014). Second, not all eligible firms that apply for the incentive successfully complete the necessary administrative procedures to receive the incentive. Third, some eligible firms may not apply in the first place, either due to lack of knowledge about the scheme or due to the high costs of filing for the incentive. As filing costs are mostly ‘fixed’ (that is, unrelated with the quantities exported), the cost-benefit ratio is larger, the smaller the export flow is (and the smaller the firm is).

Given the ad-hoc allocation system, the majority of the increase in claimed incentives in values is due to firms that were exporting an eligible transaction the previous fiscal year but were unable to benefit from the incentive. These firms presumably applied for the incentive when there was no enough money left for the incentive the previous year. Table 2 decomposes the claimed transactions for fiscal years 2013 and 2014 into incumbent firms, previous non-claimants and entrants. An incumbent firm is a firm that received the incentive the previous year and is receiving it again in the current year. A previous non-claimant is a firm that exported an eligible product to an eligible destination in the previous year and for whatever reason did not receive an incentive but is now receiving it. An entrant is a firm that did not export an eligible product in the previous year, but is now exporting an eligible product in the current year and is also receiving the incentive. The share of export value belonging to previous non-claimants increased from 52.1% in 2013 to 63.1% in 2014. Incumbent firms saw a decrease in export share from 47.5% to 36.4%, respectively. Entrants constituted a very small share of export value in both fiscal years.

**Table 2. Decomposition of Claimed Transactions,
(FYs 2013-2014) (Values in \$ Millions)**

Type of firms	FY 2013		FY 2014	
	Export Value	Share of Export Value	Export Value	Share of Export Value
Incumbent Firms	\$19.60	47.50%	\$27.30	36.40%
Previous Non-Claimants	21.5	52.10%	\$47.30	63.10%
Entrants	\$0.20	0.40%	\$0.40	0.50%
Total	\$41.20	100.00%	\$75.00	100.00%

Source: Author calculation based on data from Nepal's customs office and Nepal's Rastra Bank.

What if we change the focus of analysis from the share of eligible export values that are reached by incentives to the share of eligible firms? *What proportion of firms actually obtain the cash incentive out of all the eligible ones? How many firms are obtaining it, year after year? What is the probability of obtaining it, given that you have obtained it the year before?* These questions are addressed below.

In 2012, the probability of obtaining the cash incentive for firms that were eligible was 3.3 percent and it has been increasing ever since. That year, 24 firms obtained the incentive. In 2013, the probability of obtaining the cash incentive increased to 5.1%, while in 2014 increased to 14.8% (see Table 3).

There are substantial fixed costs associated with filing for the cash incentive, which makes it easier for firms that have already obtained the cash incentive at least once, to obtain it again. The high fixed costs of filing for the cash incentive have been brought up by exporters from different sectors. Anecdotal evidence suggests that the process to file is not only burdensome but it is also lengthy in terms of the time it takes from filing until receiving the cash.⁴ A proxy for these fixed costs is the conditional probability of obtaining the incentive in a year, given that you had obtained it a year before. In fact, in 2013, the probability of obtaining the incentive given that the firm had obtained the incentive the year before was 50%.⁵ That is, while the unconditional probability of obtaining the incentive for eligible firms was 5.1% in 2013, those firms that received it the year before found it ten times easier to receive it again in 2013. One interpretation of this result is that there are substantial fixed costs associated with filing for the cash incentive and so, after a firm does it once, it is much easier to do it again (see Table 3).

⁴ In fact, when we interviewed exporters in 2013, for the preparation of a Trade Competitiveness Diagnostic in Nepal, one exporter referred to complexity of obtaining the cash incentive in the following way: "it is as if they invited you for dinner, but when you knocked on the door, they asked you to enter climbing through the roof".

⁵ The conditional probability of an event happening, say, receiving the incentive in 2013 (R13), given that it has happened in 2012 (R12) equals the ratio of the joint probability of R13 and R12 happening to the probability of R12 happening. Plugging in these probabilities: $P(R13|R12) = P(R13 \cap R12) / P(R12) = 1.6\% / 3.3\% = 50\%$.

Has the fast-track reduced the fixed costs of filing?

As mentioned, in addition to making the incentive scheme less generous, the changes introduced to it in 2013 brought in a ‘fast-track’ for selected products. The fast-track aimed at reducing the costs of filing in principle allowing firms exporting the selected products to claim the incentive without proving local content in their exports. The results from field-level interviews suggest that the fast-track did not reduce the costs of filing. This anecdotal evidence is supported by an examination of the evolution of our proxy for fixed costs: the conditional probability of a firm obtaining the incentive given that it had obtained it in the past.

The conditional probability of a firm obtaining the incentive given that it had obtained it before, *increased* rather than fall. The probability of receiving the incentive in 2014 given that the firm had received it in 2013 is 62%, 12 percentage points up from the year before. And the probability of receiving it in 2014 given that you received it in 2012 is 70%. This adds to the evidence suggesting that fast-tracking *did not* reduce the fixed costs of claiming.

Table 3: Degree of inertia in obtaining the incentive – firm level

		2012		
		<i>Received</i>	<i>Did not receive</i>	<i>Total</i>
2013	<i>Received</i>	12	37	49
	<i>Did not receive</i>	12	675	687
	<i>Total</i>	24	712	736

		2012		
		<i>Received</i>	<i>Did not receive</i>	<i>Total</i>
2013	<i>Received</i>	1.6%	5.0%	6.7%
	<i>Did not receive</i>	1.6%	91.7%	93.3%
	<i>Total</i>	3.3%	96.7%	100.0%

		2013		
		<i>Received</i>	<i>Did not receive</i>	<i>Total</i>
2014	<i>Received</i>	24	89	113
	<i>Did not receive</i>	15	636	651
	<i>Total</i>	39	725	764

		2013		
		<i>Received</i>	<i>Did not receive</i>	<i>Total</i>
2014	<i>Received</i>	3.1%	11.6%	14.8%
	<i>Did not receive</i>	2.0%	83.2%	85.2%
	<i>Total</i>	5.1%	94.9%	100.0%

		2012		
		<i>Received</i>	<i>Did not receive</i>	<i>Total</i>
2014	<i>Received</i>	16	103	119
	<i>Did not receive</i>	7	575	582
	<i>Total</i>	23	678	701

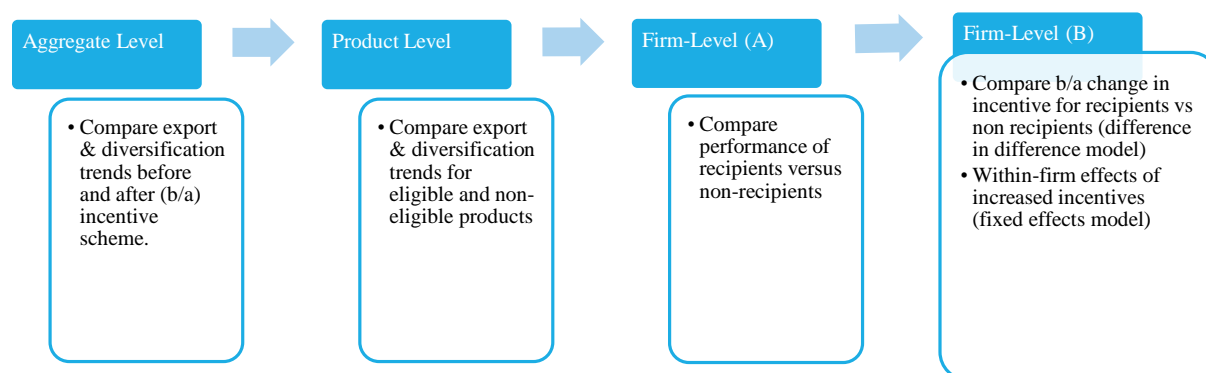
		2012		
		<i>Received</i>	<i>Did not receive</i>	<i>Total</i>
2014	<i>Received</i>	2.3%	14.7%	17.0%
	<i>Did not receive</i>	1.0%	82.0%	83.0%
	<i>Total</i>	3.3%	96.7%	100.0%

Source: Author calculation based on data from Nepal’s customs office and Nepal’s Rastra Bank.

2. Incentive Impact Assessment

The four subsections below approach the question of how impactful the cash incentive has been on export growth and diversification at different levels of disaggregation (Figure 2 shows the four different levels of analysis).

Figure 2: Schematic View of Different Stages of Impact Assessment



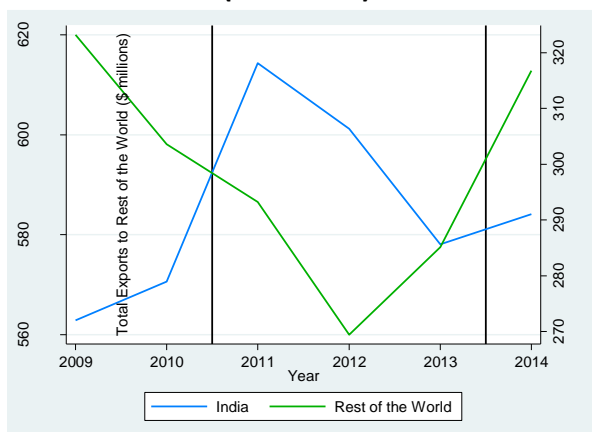
Source: Authors' elaboration

Impact at the aggregate level

A first pass to understand whether the cash incentive has had any effect on export performance is to look at aggregate export trends before and after the scheme was introduced in 2010/11. One of the main goals of the incentive regime was to increase market diversification, specifically away from India. Figure 3 shows that exports to India increased by \$44 million from the beginning of the incentive program in 2010 to 2011. Exports to countries other than India were steadily declining from 2009 to 2012. It is not until 2013 that exports to other countries begins to increase, at which point the incentive program has become less generous. In addition, exports to India do fall but remain larger than their pre-program levels.

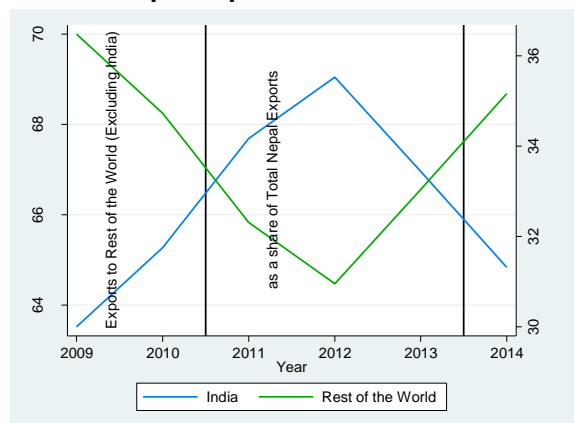
India maintains a very large share of the destination market for Nepal's exports. Figure 4, confirms the points made above that the influence of the incentive program cannot be seen at the macro level. We would have expected to see India's share of exports to decrease after the incentive program began, but the opposite is observed at the macro level. India's share as a destination for Nepal exports is increasing from 2009 until 2012 (likely driven by relative faster growth of India versus the rest of the world during that period). Nepal exports begin diversifying away from India in 2013, the year in which the incentive regime became less generous.

Figure 3. Total Nepal Exports to India and All Other Countries (\$ Millions)



Source: Authors' calculations based on UN Comtrade

Figure 4. India and All Other Countries' Share in Total Nepal Exports



Source: Authors' calculations based on UN Comtrade

Impact at the Product Level

This section looks at the relative performance of products that were targeted by the export incentive versus that of products that were not targeted. Employing highly detailed export information obtained from the Nepalese Customs Administration, this section provides an overview of the impact of this policy on export flows and, more importantly, on export diversification. The analysis is performed at the product level (i.e. export performance of eligible products vis-a-vis ineligible products). Later in the document, the performance of firms that received the incentive will be compared with that of firms that did not receive it.

There are 30 categories of products that were deemed eligible by the government of Nepal to receive the cash incentive. In 2012, these 30 product categories represented 40% of the value of total exports. These categories include 362 products at the highest level of disaggregation of the HS classification (6-digits). Carpets, polyester yarn, and herbs are the most important products, accounting for 25% of total export value. Readymade garments, lentils, tea, semi-processed skins are less important products representing altogether around 12% of total export value. The other 23 product categories represent merely 3% of total exports, including 5 categories where no exports are recorded in the data.⁶ There were 952 firms exporting eligible products, which account for 72% of the total number of exporters. Table 4 shows how important the eligible product categories were in 2012.

⁶ The data includes solely formal export transaction recorded by customs offices during the period 2012-2015. Informal trade between India and Nepal is pervasive. Taneja et al. (2015) estimates that its size is almost as large as that of formal trade. Therefore, the analysis presented in this section regarding the importance of India is just the lower bound of total bilateral trade.

Although products exported to India were ineligible to receive an incentive, in 2012 India was the most important destination for eligible product categories, representing 46% of all exports of eligible products. Total exports to India accounted for 70% of Nepal's total export value; however, India's importance as a destination greatly varies among eligible product categories. For example, while exports of carpets to India, the most important eligible product category, represented merely 1% of total exports, almost all exports of polyester yarn, herbs, vegetable oil, fruits and turmeric were directed to India.

**Table 4 Export Performance of Eligible Products
(Fiscal Year 2012)**

Eligible Product Category	Total Exports				Exports to India	
	Export Value (millions)	Export share ^a	Nbr. Firm.	Nbr. Dest.	Share in total product exports ^b	Share in total Nbr. Of firms, by product ^c
1 Carpet and woolen products	\$ 104.9	11.6%	559	81	1.2%	3%
2 Polyester/viscous yarn	\$ 79.1	8.8%	9	4	93.4%	78%
3 Herbs	\$ 50.9	5.6%	84	12	99.0%	83%
4 Ready made garments	\$ 37.9	4.2%	432	72	10.8%	3%
5 Lentils	\$ 28.3	3.1%	28	5	8.6%	61%
6 Tea	\$ 18.9	2.1%	81	26	86.8%	57%
7 Semi-processed hide and skin (Crust skin	\$ 13.0	1.4%	13	15	31.0%	85%
8 Ready to eat chow-chow	\$ 7.5	0.8%	24	15	68.4%	17%
9 Handicraft and wooden craft	\$ 3.8	0.4%	293	65	2.2%	4%
10 Vegetable fat/oil	\$ 3.0	0.3%	9	4	95.9%	56%
11 Bran	\$ 2.5	0.3%	40	5	64.3%	83%
12 Processed herbs and essential oils	\$ 1.4	0.2%	32	30	16.7%	0%
13 Pashmina and silk products	\$ 1.1	0.1%	44	20	0.0%	0%
14 Precious and semi-precious jewelry	\$ 1.0	0.1%	40	17	0.0%	28%
15 Vegetables	\$ 0.8	0.1%	18	6	46.4%	61%
16 Wheat flour	\$ 0.7	0.1%	7	5	1.7%	14%
17 Any kind of seed	\$ 0.4	0.0%	8	7	24.8%	25%
18 Ball pen	\$ 0.3	0.0%	1	14	0.0%	0%
19 Handmade paper and their products	\$ 0.3	0.0%	18	14	0.1%	11%
20 Gold and silver ornaments	\$ 0.2	0.0%	64	23	0.0%	0%
21 Fruits	\$ 0.2	0.0%	16	4	92.8%	69%
22 Turmeric	\$ 0.1	0.0%	6	3	94.0%	33%
23 Processed honey	\$ 0.0	0.0%	4	4	0.0%	0%
24 Processed Coffee	\$ 0.0	0.0%	10	5	0.0%	0%
25 Flower (cut flower)	\$ 0.0	0.0%	4	2	0.0%	0%
26 Transfer	\$ -	0.0%	0	0	0.0%	0%
27 Steel poles and accessories	\$ -	0.0%	0	0	0.0%	0%
28 Dried Ginger	\$ -	0.0%	0	0	0.0%	0%
29 Ginger	\$ -	0.0%	0	0	0.0%	0%
30 Cardamom	\$ -	0.0%	0	0	0.0%	0%
Total Eligible Products	\$ 356.5	39.5%	952	106	45.8%	23.4%

Notes: a) Exports as a share of total export value; b) exports as a share of total product exports; c) number of exports as a share of total number of firms exporting the product.

Source: Author calculation based on data from Nepal's customs office and the Central Bank.

The export performance of eligible transactions slightly outperformed that of ineligible transactions. Eligible transactions are defined as an export of an eligible product to any destination other than India. Even though the incentive scheme became less generous in 2013,

the values of eligible transactions grew by 0.4% in 2013 and 8.2% in 2014. The value of ineligible transactions decreased in 2013 by 6.8% and increased by 7.7% in 2014. Eligible transactions represented around 31% of total eligible and ineligible transaction values in 2014 (Table 5).

**Table 5. Performance of Eligible Transactions
(FYs 2012-2014)**

Fiscal Year	Eligible Transactions		Ineligible Transactions	
	Export Value	Export Growth	Export Value	Export Growth
2012	\$200.4		\$701.3	
2013	\$201.3	0.4%	\$653.5	-6.8%
2014	\$217.8	8.2%	\$703.7	7.7%

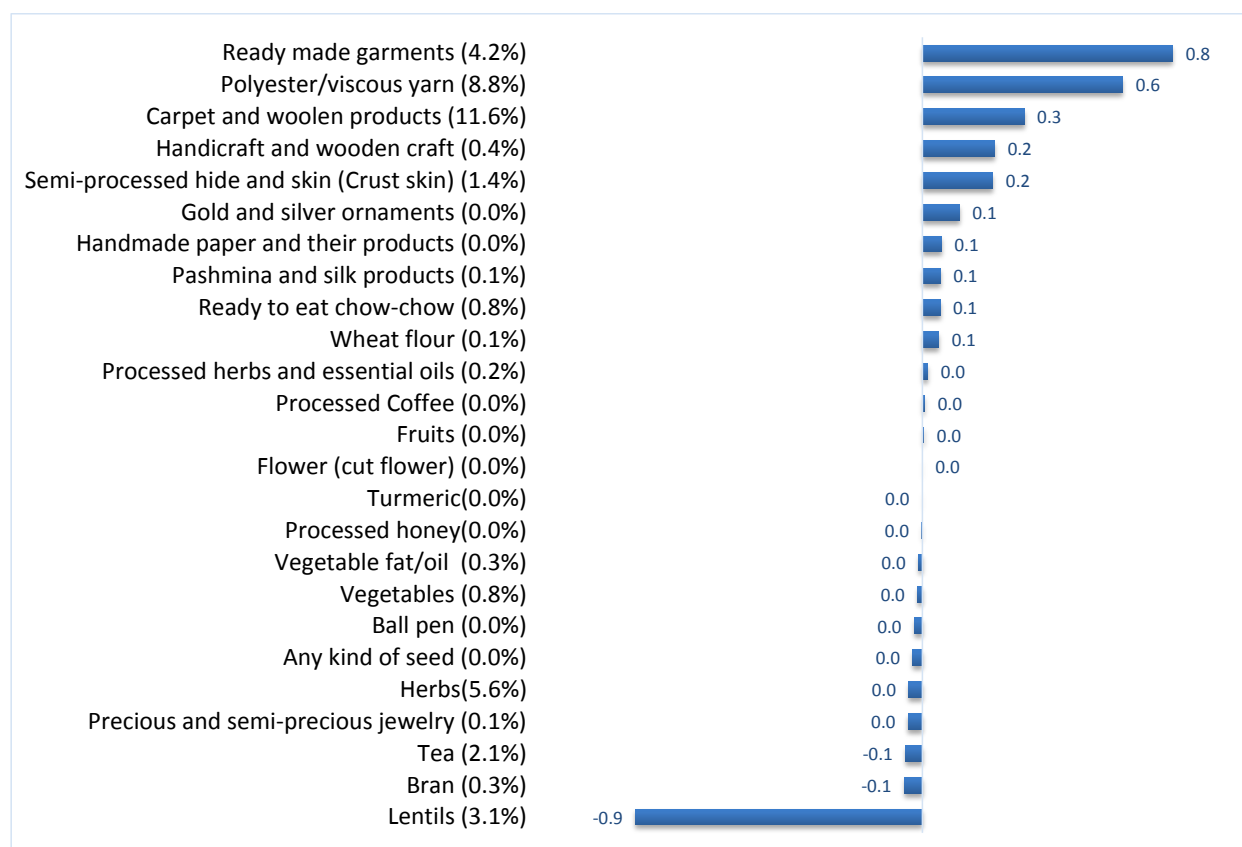
Note: This tables shows indicators of export performance for both eligible and ineligible export transactions.

Source: Author calculation based on data from Nepal's customs office and the Central Bank.

Looking at overall export shares...

When comparing 2012 with 2014, exports of readymade garments, polyester yarn and carpet products to markets other than India increased noticeably at the same time as the incentive value in percentage terms was reduced. Export shares of eligible transactions of these products grew by 0.8, 0.6, and 0.3 perceptual points, respectively (Figure 5). These increases in export share are remarkable because these products accounted for 25% of Nepal's total exports in 2012. However, only exports of polyester yarn were highly concentrated to the Indian market in 2012 – the other two were already diversified away from India (see Table 4). Eligible transactions of other mid-important products (such as semi-processed skins and tea) did not gain export share after the policy was implemented. Lentils, whose exports accounted for 3% of total Nepalese exports in 2012, were highly concentrated in the Indian market and became more so in 2014.

**Figure 5. Difference in Export Shares of Eligible Transactions
(FYs 2012-2014)**



Note: This figure shows the difference of export shares of eligible transactions (export of eligible products to destination other than India) between FY 2012 and FY 2014. Export shares are computed as the total export value of each product as share of total Nepali exports. The percentages within brackets is the total export share of eligible products in 2012

Source: Author calculation based on data from Nepal's customs office and the Central Bank.

For those eligible products whose exports were originally highly concentrated in India, there is mixed evidence about market diversification. Within the set of eight products categories for which India accounted for at least 50% of total export value in 2012, only four items show a diversification away from India. These products are herbs, polyester yarn, fruits, and ready-to-eat chow-chow. Fourteen of the thirty product categories diversified away from India (Table 6).

**Table 6. Market Diversification of Eligible Product Categories
(FYs 2012-2014)**

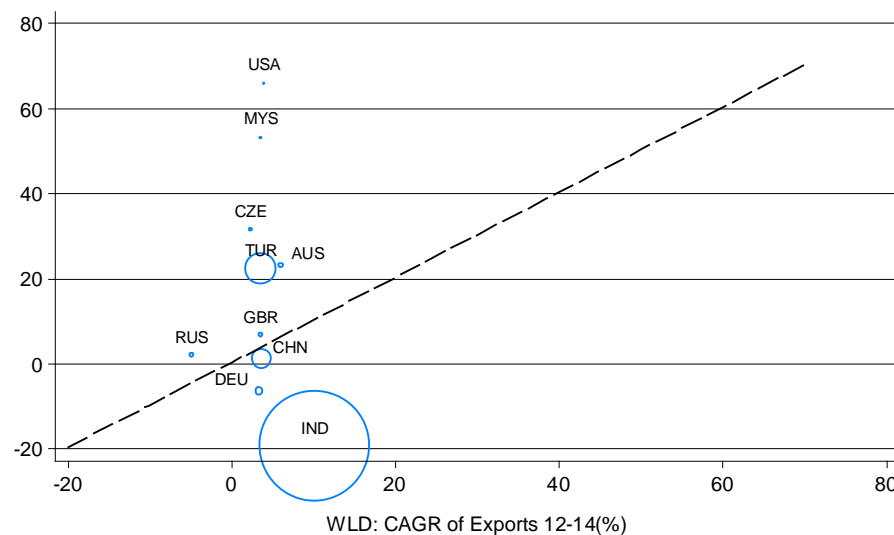
Eligible Product Categories	2012 India Export Share	HHI 2012	HHI 2014	
Herbs	99.0%	0.86	0.76	↓
Vegetable fat/oil	95.9%	0.92	1.00	↑
Turmeric	94.0%	0.89	0.92	↑
Polyester/viscous yarn	93.4%	0.84	0.65	↓
Fruits	92.8%	0.86	0.59	↓
Tea	86.8%	0.75	0.79	↑
Ready to eat chow-chow	68.4%	0.49	0.44	↓
Bran	64.3%	0.52	0.69	↑
Vegetables	46.4%	0.30	0.65	↑
Semi-processed hide and skin (Crust skin)	31.0%	0.20	0.19	↓
Any kind of seed	24.8%	0.39	0.27	↓
Processed herbs and essential oils	16.7%	0.10	0.14	↑
Ready made garments	10.8%	0.14	0.14	↔
Lentils	8.6%	0.82	0.91	↑
Handicraft and wooden craft	2.2%	0.10	0.08	↓
Wheat flour	1.7%	0.80	0.83	↑
Carpet and woolen products	1.2%	0.19	0.18	↓
Handmade paper and their products	0.1%	0.25	0.25	↔
Ball pen	0.0%	0.12	0.80	↑
Flower (cut flower)	0.0%	0.83	0.58	↓
Ginger	0.0%	0.99	1.00	↑
Gold and silver ornaments	0.0%	0.16	0.36	↑
Pashmina and silk products	0.0%	0.41	0.25	↓
Precious and semi-precious jewelry	0.0%	0.14	0.15	↑
Processed Coffee	0.0%	0.24	0.49	↑
Processed honey	0.0%	0.80	0.58	↓
Steel poles and accessories	0.0%	0.99	0.90	↓

Note: This tables show the market concentration indexes for eligible product categories in 2012 and in 2014. The table is sorted by the degree of export concentration of each product in the Indian market in 2012. The HHI is the Herfindahl–Hirschman Index, which is used to measure the concentration of exports across markets incorporating the importance of each destination in the aggregate exports of the product. The value of the index is monotonically decreasing in concentration and therefore, higher values are associated with higher levels of export concentration.

Source: Author calculation based on data from Nepal's customs office and the Central Bank.

The United States, the Czech Republic, Turkey, Malaysia and Australia are the emerging destinations for products that show diversification away from India. Figure 6 compares the average growth rate of Nepal's exports to its top 10 destinations between 2012 and 2014 versus the same measure for the world (excluding Nepal). The bundle of products considered are those whose exports to India represent at least 50% of total export value and that experienced a diversification away from India after the change in the incentive scheme. These products are herbs, polyester yarn, fruits, and ready to eat chow-chow (see Table 6). If a destination is above (below) the 45-degree line, exports from Nepal grew at a higher (lower) rate than export from the rest of the world, indicating that Nepal gained (lost) market share in that particular market. The size of the bubble indicates the relative importance of each destination in the considered export bundle. As expected, Nepal has lost market share in India in those products where market diversification has been observed. The United States, the Czech Republic, Turkey and Malaysia are the emerging markets where Nepal has gained market share. For instance, between 2012 and 2014 Nepal's exports of these products to Turkey grew by 22% whereas the exports of the same products from the rest of the world grew by only 5%.

**Figure 6. Growth Orientation of Markets
(FYs 2012-2014)**



Source: Authors' calculations based on UN Comtrade.

Impact of the Incentive at the Firm-Level

To understand the impact at the firm level we proceed in two stages. First, we compare the performance in terms of export growth and in terms of export diversification of firms that claim the incentive, and firms that do not claim the incentive but export eligible products. Now, firms that claim the incentive may be ‘special’ and therefore may be performing differently than others for reasons other than receiving the incentive. For example, firms receiving the incentive are much larger than those that do not receive it but are in principle eligible. Firms that received the incentive consistently throughout the period, exported in median, \$88,000 in 2014, while those that never received it while being eligible exported a median of \$4,000 in the same year (Table 7). This is just one aspect by which these firms may have special traits.

For these reasons we use an approach that allows us to eliminate any time-invariant factor that makes these claimant firms ‘special’. We rely on the fact that the incentive conditions changed in June 2013 – the incentive was reduced – and test the difference in the change in performance before and after that change in mid-2013 between firms that claimed the incentive and firms that did not claim the incentive (both for all firms, and for eligible firms only).⁷

Performance of recipients versus performance of non-recipients

In 2014 firms that export an eligible transaction but do not claim the incentive performed better than firms that systematically claimed the incentive. Exports of eligible transactions increased \$16.5 million from \$201.3 million in 2013 to \$217.8 million in 2014 (Table 5). Assigning firms to different cohorts based on whether they claimed or did not claim an incentive, the \$16.5 million increase in eligible transactions is mainly attributed to firms that did not receive the incentive. Table 7 displays statistics for three cohorts of firms, those that always claimed at least one transaction for every fiscal year, those that received at least one eligible transaction for one or more fiscal years, and those that never received for any of the fiscal years. The export value of eligible transactions of firms that received the incentive for every year decreased about \$5.8 million in 2014; however, the export value of eligible transaction for firms that never received the incentive increased about \$21 million during the same fiscal year. Therefore the \$16.5 million increase in overall eligible transactions is mainly accounted for by firms that never received an incentive.

Despite the reduction in the incentive, firms that received the incentive consistently diversified their product and destinations. Table 7 shows that the median number of products receiving the incentive and exported by firms that received the incentive consistently actually grew from 3 in 2012 to 5 in 2014. Firms that received the incentive at least once throughout the sample period increased the median number of products exported shortly in 2013 from 5 to 7; however, in 2014, these firms were back to exporting 5 products per firm. Market level diversification is fairly similar between firms that consistently receive the incentive and those that receive it at least once. Firms that consistently received the incentive saw an increase in the median number of destination

⁷ This method is known as “difference-in-difference” given that it consists of computing the two aforementioned differences.

from 6 in 2012 to 7 in 2014. Those numbers were 6 and 8 respectively for firms that received the incentive at least once.

**Table 7. Performance of Firms
(FYS 2012-2014)(Values in \$ Millions)**

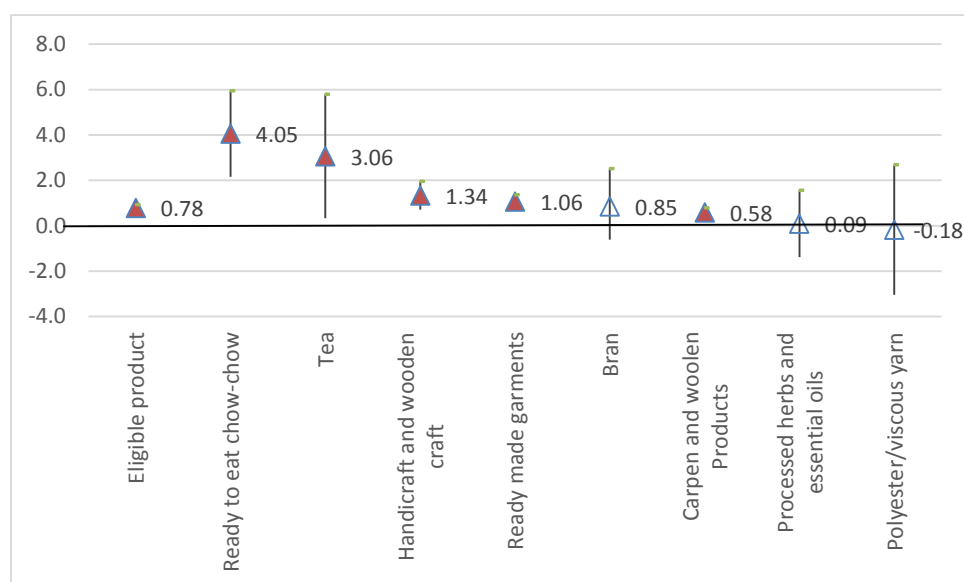
	2012	2013	2014
Firms that received the incentive every fiscal year			
<i># of firms</i>	10	10	10
<i>Eligible Transactions</i>			
<i>Export Value (Millions)</i>	\$26	\$26	\$21
Median Export Value (thousands)	\$110	\$146	\$88
% Change		34%	-40%
Median # of products	4	4	5
Median # of destinations	8	8	9
<i>Claimed Transactions</i>			
<i>Export Value (Millions)</i>	\$18	\$19	\$14
Median Export Value (thousands)	\$168	\$337	\$91
% Change		100%	-73%
Median # of products	3	4	5
Median # of destinations	6	6	7
# of HS 6 digit products	4	4	4
# of destinations	16	15	21
Firms that received the incentive in at least one fiscal years			
<i># of firms</i>	138	138	138
<i>Eligible Transactions</i>			
<i>Export Value (Millions)</i>	\$86	\$91	\$92
Median Export Value (thousands)	\$10	\$10	\$9
% Change		-3%	-5%
Median # of products	10	9	12
Median # of destinations	9	8	9
<i>Claimed Transactions</i>			
<i>Export Value (Millions)</i>	\$9	\$22	\$61
Median Export Value (thousands)	\$93	\$13	\$17
% Change		-86%	31%
Median # of products	5	7	5
Median # of destinations	6	6	8
# of HS 6 digit products	8	19	21
# of destinations	13	45	54
Firms that never received the incentive for any fiscal year			
<i># of firms</i>	1016	1016	1016
<i>Eligible Transactions/ Not Claimed</i>			
<i>Export Value (Millions)</i>	\$88	\$84	\$105
Median Export Value	\$3	\$3	\$4

% Change		4%	18%
Median # of products	12	10	11
Median # of destinations	8	7	8
# of HS 6 digit products	209	225	231
# of destinations	98	88	94

Source: Author calculation based on data from Nepal's customs office and the Central Bank.

Firms that received the incentive outperformed other firms exporting the same product to the same destination in the same year. We find that, on average, the export value of exporters that received the incentive is 2.2 times greater than exports from similar firms that do not receive the incentive. As expected, there is some heterogeneity in this impact across eligible product categories. Figure 7 shows the estimated coefficients and their confidence intervals for the most important eligible categories. Exporters that claimed the incentive for ready to eat chow-chow, tea, handicraft and wooden craft, ready-made garments, and carpet products statistically outperformed their counterparts by a factor of 57.6, 21.3, 3.8, 2.9, and 2.3, respectively.

**Figure 7 Impact of the Incentives at the Firm-Level
(Within product-destination-year regression)**



Source: Author calculation based on data from Nepal's customs office and the Central Bank.

Using a difference-in-difference strategy to test the impact of the change in the incentive scheme on exports growth, levels and diversification

Firms that receive the incentive are likely to be ‘special’. As mentioned, they are systematically larger than those that, exporting an eligible product, do not obtain the incentive (either because they don’t file for the cash incentive or because they cannot obtain it) (see Table 7). They may also have other unobservable characteristics that make them better positioned both to claim and obtain the incentive and to grow and diversify. If that’s the case, just comparing the performance of recipients and non-recipients may not be a good indicator of the impact of the incentive scheme on export performance because there are omitted variables that play a role and are unobservable.

An alternative approach helps to obtain a more accurate answer to the question: *how effective has the cash incentive been in encouraging export growth and diversification?* We take advantage of the fact that the incentive regime was modified in June 2013.⁸ As long as what makes these firms special is constant over time and reduction in the incentive is present in the data, a ‘double comparison’ is helpful. As stated earlier in this note, we tested the data to see if there was an actual reduction in the incentive and found evidence suggesting there was. This double comparison involves comparing the performance in terms of growth or diversification ‘before and after’ this incentive modification for firms that do get the incentive with firms that do not (both for the groups of eligible firms, and for all firms in the dataset). By comparing these two differences: the before and after of recipients with the before and after of non-recipients, we eliminate all firm-specific factors that do not change over time. For the purposes of these comparisons, we look at fiscal years 2012 and 2014

Two models were estimated using this method. The first uses all observations while the second drops outliers in terms of effective incentive rates received.⁹ The first model keeps all observations regardless of the amount of incentive the firms received relative to exports (i.e.: does not drop outliers). The second model keeps only firms that received up to 4 percent of the cash incentive relative to exports and treats the rest as outliers that we then drop. Results are presented in Table 8 and Table 9 in Appendix 1.

EFFECTS ON FIRMS’ RATE OF GROWTH OF EXPORTS

There is no evidence of the change in the incentive regime having effect on export growth. Controlling for time-invariant firm-specific characteristics, time-variant product-specific world

⁸ As mentioned in the introduction, the modification implied the introduction of a fast-track for products in the NTIS so that local content need not to be certified, as well as a reduction in the cash incentives. Evidence reported in this note, both from field-interviews and from data analysis, suggest the fast-track had no effect on the fixed costs of filing (see Section 1 of this note).

⁹ To detect outliers we calculated the ‘effective incentive rate received’ as the quotient of the incentive value received by a given firm due to an eligible product/transaction and the value exported by that firm in that eligible product/transaction. For some firms, the effective incentive rate was as large as 20 – that is, 2000%. For about 25% of firms the effective incentive rate was above the 4% defined as the maximum possible rate. We attribute that to misreporting, either of the incentive data or of the export transaction data and drop it from the dataset.

demand shocks and product-specific shocks to domestic supply conditions, results show no effects of the change in the incentive regime on the rate of growth of exports (columns 1 & 2 of Table 8 and Table 9). That is, making the incentive scheme *less generous* did not affect the performance of firms that were receiving the incentive. Take for example the first two columns of Table 8. They show the results of estimating the impact of the incentive change on export growth both on all firms (column 1), and on the subset of firms that are in principle eligible to receive the incentive (column 2). Results show that among eligible firms only, export growth was significantly greater *after* the change in the regime (2014, that is, when it became less generous) than before (2012). There is no difference in growth for firms that receive the incentive and those that do not receive it once the other controls are incorporated. More important is the interpretation of the coefficient on the variable 'Incentive*Before/After'. This coefficient captures whether the export growth of firms that were receiving the incentive reacted any differently to the change in the incentive scheme from that of firms that were not receiving the incentive. If the incentive mattered for export growth, we would expect that the growth rate of exports of those firms receiving the incentive would be particularly affected by the incentive scheme becoming less generous. In other words, when we compare the difference in growth before and after the change in the incentive between recipients and non-recipients of the incentive, we find none. The change in the incentive regime had no effect on growth.

EFFECTS ON FIRMS' EXPORT LEVELS

Evidence is mixed on whether the change in the incentive scheme had any effect on the level of firm exports depending on whether we control for outliers or not. We look at the reduction in the incentive on the level of firm exports for both models. The first model does not drop outliers – that is keeps all firms regardless of whether data suggests they receive more than the maximum incentive rate allowed. In that case we see that the reduction in the incentive scheme is associated with a decrease in export levels (columns 3 and 4 of Table 8). When we control for outliers (model reported in Table 9) we see that the reduction in the incentive scheme is associated with no change in the level of exports (columns 3 and 4). Therefore, no definitive conclusion can be drawn from these results. Interestingly, and as argued before, the results confirm that firms receiving the incentive are larger than those not receiving it, all other things held constant.

EFFECT ON FIRMS' EXPORT BUNDLE CONCENTRATION

There is no evidence of the reduction in the incentive having increased firms' concentration of their export bundles. Similarly, we looked at the effects of the change in the incentive on concentration (the Herfindahl index) at the market (columns 5 and 6 in Table 8 and Table 9) and at the product level (columns 7 and 8 in Table 8 and Table 9). Results show, as shown above in this document, that firms that receive the incentive have less concentrated export bundles in terms of destinations they reach. Also, we do find, when looking at the subset of eligible firms,

that those firms that received the incentive reduced the concentration of their export bundles faster than those that did not receive the incentive *after* the incentive actually *shrank*, these results are consistent throughout both models. They suggest that the incentive itself was not behind a process of diversification. On product diversification, we find evidence that firms that received the incentive became more significantly concentrated; however, these results may be affected by outliers and do become insignificant when outliers are removed.

Using a fixed effects model to test for the effect of the effective incentive rate on the export growth, levels and diversification

Not all firms may have experienced a reduction in the incentive rate received after the policy change in June 2013. Take a firm that was already receiving 1% before June 2013. The change in the upper tier of the incentive will not have any effect on this firm that, if continued producing eligible products and claiming and receiving the incentive, will continue receiving 1% after June 2013. For this reason, it is important to complement the approach discussed above, with another one that takes into account how much of the incentive firms were actually receiving.

This complementary approach answers the following question: For a given firm, how does export growth, levels or diversification changes, as the amount of incentive received changes? Similarly to the double difference models discussed above, here we also control for time-invariant firm-specific characteristics along with time-varying product-specific world demand shocks and shocks to domestic supply conditions. We also look at whether the effects of the incentive on firms' performance is heterogeneous by firm size. As before, we estimate two models: one that uses all observations available, and one that drops outliers as defined above. Results are presented in Table 10 and Table 11 in Appendix 1

There is no evidence the incentive received in a given year affected export growth, levels or product and market concentration. Columns 1 through 4 of Table 10 show the amount of incentive received the previous year did not have a significant effect on firm exports, looking at the universe of all firms (column 1) and at that of eligible firms only (column 2). Similarly, there is no evidence of different effects by exporter size (columns 3 and 4). The effect on the growth rates of exports is also insignificant from a statistical point of view, both when looking at all firms (columns 5 and 6) and when looking at the effect by size class (columns 7 & 8). The effect on market concentration (columns 9 through 12) was insignificant and so was the effect on product concentration (columns 13 through 16). These results are consistent with both samples used. (Please see Appendix 1). We conclude that most of the evidence indicates that the overall impact of the incentive on exports and concentration was insignificant.

Appendix 1: Regression Results

Table 8. Difference in Difference Results for Change in Incentive Regime in June 2013 – Using All Firm Observations

<i>Variables</i>	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>
	<i>Export Growth</i>		<i>Level of Exports</i>		<i>Market Concentration</i>		<i>Product Concentration</i>	
<i>Incentive Dummy</i>	0.014 (0.243)	-0.010 (0.247)	1.969*** (0.392)	2.750*** (0.367)	-0.087* (0.051)	0.070 (0.054)	0.051 (0.055)	0.096* (0.052)
<i>Before/After Dummy</i>	0.053 (0.051)	0.231*** (0.065)	-0.043 (0.076)	-0.105 (0.088)	0.008 (0.010)	0.020 (0.013)	-0.003 (0.011)	0.020 (0.012)
<i>Incentive*Before/After</i>	-0.194 (0.268)	-0.278 (0.273)	-0.755* (0.431)	-0.904** (0.405)	-0.046 (0.056)	-0.136** (0.060)	0.041 (0.060)	-0.019 (0.058)
<i>World Export Growth</i>	-0.059*** (0.022)	-0.013 (0.033)						
<i>Nepal Firm Relevant Export Growth</i>	0.340*** (0.016)	0.320*** (0.022)						
<i>Level of World Exports</i>			0.028 (0.027)	-0.105*** (0.037)	-0.028*** (0.004)	-0.037*** (0.006)	-0.053*** (0.004)	-0.100*** (0.005)
<i>Level of Nepal Firm Relevant Exports</i>			0.549*** (0.017)	0.524*** (0.023)	-0.047*** (0.002)	-0.059*** (0.003)	-0.049*** (0.002)	-0.048*** (0.003)
<i>Constant</i>	0.036 (0.036)	-0.077* (0.045)	1.670*** (0.641)	4.007*** (0.910)	2.120*** (0.084)	2.488*** (0.135)	2.635*** (0.089)	3.666*** (0.129)
<i>Observations</i>	2,317	1,511	2,688	1,799	2,688	1,799	2,688	1,799
<i>R-squared</i>	0.162	0.138	0.323	0.316	0.183	0.162	0.192	0.234

Standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

**Table 9: Difference in Difference Results for Change in Incentive Regime in June 2013 –
Removing Firm Observations with Incentive Ratio > 4 Percent**

	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>
<i>Variables</i>	<i>Export Growth</i>		<i>Level of Exports</i>		<i>Market Concentration</i>		<i>Product Concentration</i>	
<i>Incentive Dummy</i>	0.075 (0.307)	0.217 (0.360)	2.512*** (0.494)	3.291*** (0.534)	-0.154** (0.065)	0.071 (0.080)	0.008 (0.069)	0.088 (0.077)
<i>Before/After Dummy</i>	0.053 (0.051)	0.231*** (0.065)	-0.043 (0.076)	-0.104 (0.087)	0.008 (0.010)	0.019 (0.013)	-0.003 (0.011)	0.019 (0.013)
<i>Incentive*Before/After</i>	-0.061 (0.335)	-0.275 (0.388)	-0.847 (0.538)	-0.925 (0.576)	0.007 (0.071)	-0.150* (0.086)	0.062 (0.075)	-0.033 (0.083)
<i>World Export Growth</i>	-0.059*** (0.022)	-0.012 (0.034)						
<i>Nepal Firm Relevant Export Growth</i>	0.341*** (0.016)	0.319*** (0.023)						
<i>Level of World Exports</i>			0.026 (0.027)	-0.111*** (0.037)	-0.027*** (0.004)	-0.035*** (0.006)	-0.052*** (0.004)	-0.099*** (0.005)
<i>Level of Nepal Firm Relevant Exports</i>			0.551*** (0.017)	0.533*** (0.023)	-0.047*** (0.002)	-0.060*** (0.003)	-0.049*** (0.002)	-0.048*** (0.003)
<i>Constant</i>	0.036 (0.036)	-0.077* (0.045)	1.671*** (0.642)	3.992*** (0.912)	2.106*** (0.084)	2.453*** (0.136)	2.610*** (0.089)	3.639*** (0.131)
<i>Observations</i>	2,267	1,447	2,638	1,735	2,638	1,735	2,638	1,735
<i>R-squared</i>	0.164	0.140	0.328	0.317	0.182	0.164	0.192	0.230

Standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 10: Regression Results from Firm and Time Fixed Effects Model – Using All Firm Observations

	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>
<i>Variables</i>	<i>Level of Exports</i>		<i>Level of Exports</i>		<i>Export Growth</i>		<i>Export Growth</i>	
<i>Lagged Incentive Value (t-1)</i>	-7.71e-07	-2.91e-06	1.02e-05	3.53e-05	-4.55e-06	-6.10e-06	8.09e-05	7.95e-05
	(2.53e-06)	(2.64e-06)	(5.63e-05)	(5.23e-05)	(4.04e-06)	(4.43e-06)	(8.97e-05)	(8.78e-05)
<i>Medium Size Category *</i>			-4.27e-06	-2.75e-05			-0.000104	-9.19e-05
<i>Lagged Incentive Value (t-1)</i>			(5.69e-05)	(5.28e-05)			(9.07e-05)	(8.87e-05)
<i>Large Size Category *</i>			-1.18e-05	-3.99e-05			-8.37e-05	-8.49e-05
<i>Lagged Incentive Value (t-1)</i>			(5.64e-05)	(5.23e-05)			(8.98e-05)	(8.79e-05)
<i>Level of World Exports</i>	-0.106***	0.0406	-0.107***	0.0397				
	(0.0291)	(0.0487)	(0.0292)	(0.0487)				
<i>Level of Nepal Firm Relevant Exports</i>	0.368***	0.326***	0.369***	0.329***				
	(0.0230)	(0.0334)	(0.0231)	(0.0334)				
<i>World Export Growth</i>					-0.0416	0.0192	-0.0401	0.0219
					(0.0284)	(0.0516)	(0.0284)	(0.0517)
<i>Nepal Firm Relevant Export Growth</i>					0.353***	0.326***	0.351***	0.326***
					(0.0239)	(0.0318)	(0.0239)	(0.0319)
<i>Constant</i>	7.716***	4.497***	7.736***	4.525***	0.00817	0.0451	0.0234	0.0787
	(0.677)	(1.138)	(0.678)	(1.144)	(0.0375)	(0.0513)	(0.0363)	(0.0502)
<i>Observations</i>	2,323	1,510	2,323	1,510	2,323	1,510	2,323	1,510
<i>R-squared</i>	0.202	0.143	0.203	0.147	0.180	0.145	0.182	0.147
<i>Number of firm</i>	1,283	846	1,283	846	1,283	846	1,283	846

Standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 10: Regression Results from Firm and Time Fixed Effects Model – Using All Firm Observations (Continued)

	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>
<i>Variables</i>	<i>Market Concentration</i>		<i>Market Concentration</i>		<i>Product Concentration</i>		<i>Product Concentration</i>	
<i>Lagged Incentive Value (t-1)</i>	-1.63e-07 (4.80e-07)	2.21e-07 (5.20e-07)	8.96e-06 (1.07e-05)	-3.32e-06 (1.03e-05)	-3.31e-07 (5.53e-07)	-8.95e-08 (5.12e-07)	-7.32e-06 (1.23e-05)	-1.50e-05 (1.01e-05)
<i>Medium Size Category *</i>			-8.54e-06 (1.08e-05)	2.82e-06 (1.04e-05)			7.03e-06 (1.24e-05)	1.46e-05 (1.02e-05)
<i>Lagged Incentive Value (t-1)</i>								
<i>Large Size Category *</i>			-9.20e-06 (1.07e-05)	3.66e-06 (1.03e-05)			7.01e-06 (1.23e-05)	1.50e-05 (1.01e-05)
<i>Lagged Incentive Value (t-1)</i>								
<i>Level of World Exports</i>	-0.0239*** (0.00552)	-0.0274*** (0.00957)	-0.0239*** (0.00553)	-0.0273*** (0.00960)	-0.0299*** (0.00635)	-0.0298*** (0.00943)	-0.0299*** (0.00636)	-0.0304*** (0.00944)
<i>Level of Nepal Firm Relevant Exports</i>	-0.0228*** (0.00437)	-0.0474*** (0.00656)	-0.0226*** (0.00437)	-0.0476*** (0.00658)	-0.0445*** (0.00503)	-0.0645*** (0.00647)	-0.0446*** (0.00504)	-0.0648*** (0.00647)
<i>World Export Growth</i>								
<i>Nepal Firm Relevant Export Growth</i>								
<i>Constant</i>	1.614*** (0.128)	2.059*** (0.224)	1.613*** (0.129)	2.070*** (0.225)	2.040*** (0.148)	2.421*** (0.221)	2.064*** (0.148)	2.462*** (0.222)
<i>Observations</i>	2,323	1,510	2,323	1,510	2,323	1,510	2,323	1,510
<i>R-squared</i>	0.051	0.090	0.052	0.091	0.106	0.151	0.107	0.154
<i>Number of firm</i>	1,283	846	1,283	846	1,283	846	1,283	846

Standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

**Table 11: Regression Results from Firm and Time Fixed Effects Model – Removing Firm
Observations with Incentive Ratios > 4 Percent**

Variables	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>
	<i>Level of Exports</i>		<i>Level of Exports</i>		<i>Export Growth</i>		<i>Export Growth</i>	
<i>Lagged Incentive Value (t-1)</i>	-5.39e-07	2.96e-07	-0.000144	-5.97e-07	-7.06e-06	-6.37e-06	0.000244	-3.19e-06
	(2.96e-06)	(3.19e-06)	(0.000209)	(3.45e-06)	(4.78e-06)	(5.57e-06)	(0.000336)	(6.02e-06)
<i>Medium Size Category *</i>			0.000150	6.09e-06			-0.000268	-2.18e-05
<i>Lagged Incentive Value (t-1)</i>			(0.000209)	(9.01e-06)			(0.000337)	(1.57e-05)
<i>Large Size Category *</i>			0.000143				-0.000249	
<i>Lagged Incentive Value (t-1)</i>			(0.000209)				(0.000336)	
<i>Level of World Exports</i>	-0.103***	0.0341	-0.104***	0.0328				
	(0.0297)	(0.0488)	(0.0297)	(0.0489)				
<i>Level of Nepal Firm Relevant Exports</i>	0.365***	0.332***	0.366***	0.333***				
	(0.0233)	(0.0339)	(0.0234)	(0.0340)				
<i>World Export Growth</i>					-0.0472	0.00514	-0.0449	0.00907
					(0.0291)	(0.0541)	(0.0292)	(0.0542)
<i>Nepal Firm Relevant Export Growth</i>					0.355***	0.331***	0.353***	0.327***
					(0.0243)	(0.0338)	(0.0243)	(0.0339)
<i>Constant</i>	7.686***	4.473***	7.728***	4.570***	0.0227	0.0704	0.0396	0.109**
	(0.688)	(1.133)	(0.689)	(1.139)	(0.0388)	(0.0543)	(0.0375)	(0.0529)
<i>Observations</i>	2,267	1,439	2,267	1,439	2,267	1,439	2,267	1,439
<i>R-squared</i>	0.206	0.163	0.207	0.163	0.186	0.147	0.188	0.149
<i>Number of firm</i>	1,282	841	1,282	841	1,282	841	1,282	841

Standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 11: Regression Results from Firm and Time Fixed Effects Model – Removing Firm Observations with Incentive Ratios > 4 Percent (Continued)

	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>	<i>All</i>	<i>Eligible</i>
Variables	Market Concentration		Market Concentration		Product Concentration		Product Concentration	
<i>Lagged Incentive Value (t-1)</i>	-4.11e-08	7.53e-08	5.44e-05	1.04e-07	1.31e-07	1.53e-07	1.03e-05	3.09e-07
	(5.63e-07)	(6.42e-07)	(3.96e-05)	(6.96e-07)	(6.51e-07)	(6.37e-07)	(4.59e-05)	(6.90e-07)
<i>Medium Size Category *</i>			-5.41e-05	-1.94e-07			-1.07e-05	-1.06e-06
<i>Lagged Incentive Value (t-1)</i>			(3.97e-05)	(1.81e-06)			(4.59e-05)	(1.80e-06)
<i>Large Size Category *</i>			-5.45e-05				-1.01e-05	
<i>Lagged Incentive Value (t-1)</i>			(3.97e-05)				(4.59e-05)	
<i>Level of World Exports</i>	-0.0251***	-0.0249**	-0.0250***	-0.0249**	-0.0288***	-0.0251**	-0.0288***	-0.0249**
	(0.00565)	(0.00984)	(0.00565)	(0.00985)	(0.00653)	(0.00975)	(0.00654)	(0.00977)
<i>Level of Nepal Firm Relevant Exports</i>	-0.0217***	-0.0482***	-0.0218***	-0.0483***	-0.0438***	-0.0673***	-0.0438***	-0.0675***
	(0.00444)	(0.00684)	(0.00444)	(0.00685)	(0.00513)	(0.00678)	(0.00514)	(0.00679)
<i>World Export Growth</i>								
<i>Nepal Firm Relevant Export Growth</i>								
<i>Constant</i>	1.625***	2.021***	1.623***	2.031***	2.000***	2.354***	2.024***	2.381***
	(0.131)	(0.228)	(0.131)	(0.229)	(0.151)	(0.226)	(0.152)	(0.227)
<i>Observations</i>	2,267	1,439	2,267	1,439	2,267	1,439	2,267	1,439
<i>R-squared</i>	0.051	0.094	0.053	0.094	0.104	0.161	0.104	0.162
<i>Number of firm</i>	1,282	841	1,282	841	1,282	841	1,282	841

Standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$