Comment on "Migration and Incomes in Source Communities:
A New Economics of Migration Perspective from China"

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One of the central ideas of the "new economics of labor migration" is that migration from a village household can enable the household to overcome two major obstacles that stand in the way of its ability to transform its production technology: paucity of investment funds (a credit constraint) and scarcity of risk-mitigating devices (an insurance constraint). "In bypassing the [local] credit and insurance markets . . . migration facilitates the transformation [to the new technology]; it succeeds in doing this via its dual role in the accumulation of investment capital . . . usually generating significant urban-to-rural-flows of remittances, and through diversification of income sources, [in] controlling the level of risk" (Stark 1993, 11). A diagrammatic display of this argument provided by Taylor, Rozelle, and de Brauw (2003) constitutes an original and appealing way of synthesizing the argument. However, the diagram does not represent the argument adequately. The purpose of this note is to correct and supplement the representation offered by Taylor et al.

When migration entails net urban-to-rural remittances, the household's credit constraint is relaxed, and the household's bundle of (productive) resources expands. In a diagram depicting a linear production possibilities frontier (PPF) with, say, a traditional crop (T) measured on the horizontal axis, a household-based manufactured good (M) measured on the vertical axis, a resource (credit) constraint represented by a horizontal line ($\bar{R}$), and a price ratio of the two commodities that is flatter than the PPF schedule, the initial production mix is given by the coordinates of e_1 (fig. 1). Relaxation of the credit constraint is properly captured, as in Taylor et al., by a shift upward of the resource constraint line, say to $\tilde{R}$. The corresponding production mix is represented then by the coordinates of e_2. However, the effect of the expansion of the household's resources is not properly represented by the shift to e_2. The resource expansion entails a shift outward of the PPF schedule, say, from its initial
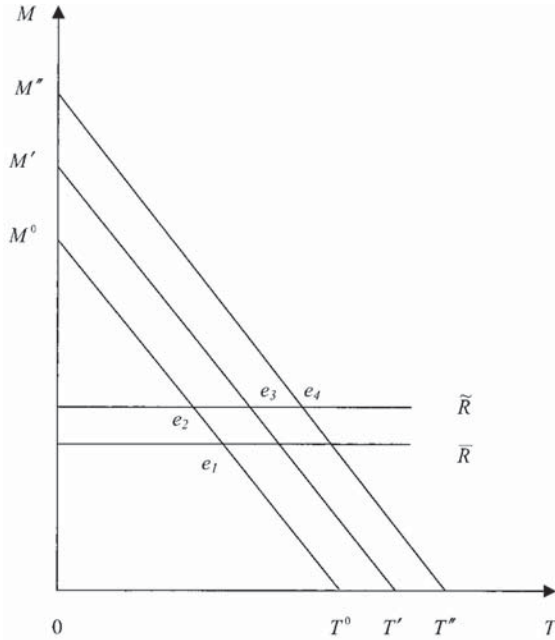
Figure 1. Potential effects of migration from a household on the household's production

locus of T^0M^0 to $T'M'$. This second shift, resulting in a production mix that is represented by the coordinates of e_3, matters greatly since if, as depicted, the shift is significant enough, production of the manufactured good and of the traditional crop will increase, contrary to the assertion of Taylor et al. that there will be "a negative impact of migration on output from the [traditional] activity" (Taylor et al. 2003, 82). Moreover, the risk-mitigating impact of migration translates into a willingness to employ a (superior yet riskier) production technology that, in the absence of migration, the household would consider too risky a proposition. This technological change further shifts the PPF schedule outward, thereby bringing about an additional expansion of the production of the traditional crop (cf. e_4).

The essence of the argument thus far is that relaxation of the credit constraint, captured by an elevated "R" line, is not the sole consequence of migration: migration also expands the household's resource base and facilitates a technological change, both of which push outward the original PPF schedule, T^0M^0.

Taylor et al. are careful to highlight a counteracting consideration: the departure of a household member reduces the production resources available to the household at origin. This effect too can be captured diagrammatically.

It implies that the outward shift of the original PPF schedule will not be all the way to $T''M''$. But it remains a strong possibility that the combined effect of an attenuated outward shift of the PPF schedule and a raised "R" line will result in an expanding, not a shrinking, production of the traditional crop.

Analytics aside, this consideration matters. A household that can increasingly expand the production of the manufactured good at the expense of the traditional crop will presumably be less responsive to the relaxation of the credit constraint (the shift upward of the $\bar{R}$ line) than a household that can implement an expansion of the manufactured good without experiencing such a contraction. Indeed, as Taylor et al. eloquently ascertain empirically, "the overall effect of migration on crop yields is actually positive" (Taylor et al. 2003, 93). This finding is nicely in congruence with the revised diagrammatic representation of the "new economics of labor migration," as provided in this note.

The finding reported by Taylor et al. tallies with the results of a new and carefully executed analysis by Yang (2004). In 1997–98, in the wake of the Asian financial crisis, households in the Philippines experienced a dramatic increase, in peso terms, in the overseas earnings of their migrant members. Yang conjectures that households became more willing to engage in riskier entrepreneurial activities at home as the overseas income increased. A test of this hypothesis yields strong evidence that in the wake of favorable income shocks, households' entrepreneurial income became "more volatile" and that "the more positive the exchange rate shock, the more likely it is that a household will take on more entrepreneurial risk" (Yang 2004, 25). Yang concludes that "more favorable economic conditions for migrants allow source households to engage in riskier productive activities" (Yang 2004, 24). On a related point, Yang also reports insignificant changes in total labor supply by the households, yet a significant compositional change in households' labor supply in favor of entrepreneurial activities. In diagrammatic terms, the results of Yang's inquiry are tantamount to two shifts outward of the PPF schedule: one due to the increased inflow of remittances, the other to the adoption of a riskier (yet mean-rewarding) production technology. In Yang's study, there is no attenuation of these shifts owing to a shrinking labor supply.

Since Taylor et al. provide evidence that "the remittances sent home by migrants . . . contribute to household incomes . . . also indirectly by stimulating crop production," evidence that they interpret as lending support to "the NELM [new economics of labor migration] hypothesis that remittances loosen constraints on production in the imperfect-market environments characterizing rural areas in less developed countries" (Taylor et al. 2003, 93), it is not possible to divorce their empirical findings from the idea of an outward

shift of the PPF schedule. But since the concept that lurks behind their empirical work is an upward shift of the credit constraint line, it is not possible, either—unlike in the context of Yang's study—to interpret their findings as an explicit confirmation of the outward shift of the PPF schedule. Moreover, by "excluding issues related to risk" (Taylor et al. 2003, 99), Taylor et al. do not shed light on the risk-mitigating impact of migration. This is unwarranted, especially in a context in which revision of the willingness to bear risks is a prerequisite to technological advance in rural production, a change that in diagrammatic terms is manifested by an outward shift of the PPF schedule.

References
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