# 2
# Model

## 2.1 Basic Setup

***Individuals and Occupational Choice***

Consider a continuum of individuals of measure one indexed by initial wealth $a_i$ (we omit the subscript $i$ whenever the context is clear and we are referring to a single individual). There are three potential occupations in the economy: subsistence ($S$), salaried work ($W$), and entrepreneurship ($E$). Subsistence work pays a fixed income $\underline{w}$, while salaried work pays the endogenously determined market wage $w$.

In order to implement a project (or to produce), entrepreneurs have to engage in an ex-ante exchange with a supplier and have to hire one unit of labor in the spot labor market. Suppliers should be broadly understood as a counterpart with which entrepreneurs engage in any type of multi-period exchange, with costs and benefits unequally distributed over periods. So they may be seen as suppliers of intermediary inputs, owners of physical capital, financial intermediaries, and so on. Depending on the contract environment, payments from entrepreneurs to suppliers may take place before or after production. In addition, entrepreneurs may also make investments that increase the value of their project. The net gain from entrepreneurship depends therefore on the realization of the value of the entrepreneurial project ($v$), on ex-ante ($t$) and ex-post ($p$) payments made to suppliers, on wages ($w$) paid to labor, and on the costs ($e$) and returns ($R(e)$) to project specific investments.

Abstracting from interest rates, this means that individuals choose the occupation $y^j$ that generates the highest net income, where $j = \{S, W, E\}$ and the $y^j$'s are given by:

$$\begin{cases} y^S = \underline{w}, \\ y^W = w, \text{ and} \\ y^E = v(\gamma) - p(\gamma) - t - w + R(e) - e. \end{cases} \tag{2.1}$$

In the expression above, $v(\gamma)$ is the realization of the value of the entrepreneur's project under state of nature $\gamma$, $\gamma \in \Gamma$; $R(e)$ is the return to the ex-ante project specific investment $e$, with $R(0) = 0$, $\lim_{e \to \mathbf{0}} R'(e) = \infty$, $\lim_{e \to \infty} R'(e) = 0$, and $R()$ continuous and twice differentiable; $t$ and $p(\gamma)$ are, respectively, the ex-ante and ex-post (potentially state-contingent) payments to the supplier; $w$ is the wage rate and $\underline{w}$ is the constant productivity in the subsistence economy.

Once individuals choose to become entrepreneurs, there are two relevant moments in their decisions. First, an entrepreneur pays $t$ to the supplier and chooses a level $e$ of ex-ante investment, which increase the value of the project independently of the ex-post realization of the state of nature. Second, uncertainty is realized and the state of nature $\gamma$ is observed. Entrepreneurs then receive the value $v(\gamma)$ of the project and the return $R(e)$ of the investment, and pay the wage cost $w$ to the worker and the ex-post transfer $p(\gamma)$ to the supplier. Whether entrepreneurs will indeed be willing to pay $p(\gamma)$ or, in other words, the set of $p(\gamma)$'s consistent with equilibrium, will be endogenously determined form the distribution of bargaining power and contract environment in the economy.

We additionally assume that individuals are risk neutral, so that they choose occupation and levels of investment (conditional on entrepreneurship) in order to maximize expected wealth. So the occupational choice problem is simply to pick the occupation with the highest expected net income, conditional on the optimal choices of an entrepreneur.

***Suppliers***

In order to focus on the issues of interest, we model the suppliers' problem in the simplest possible way. Suppliers are endowed with one unit of a homogeneous intermediary good (intermediary input or capital, for example) that is indispensable for the entrepreneurs' project. The only relevant decision of a supplier is to choose whether to allow an entrepreneur to which he was randomly matched to use his intermediary good, or whether to use it himself. If the supplier allows the entrepreneur to use his intermediary good, he receives and ex-ante payment of $t$ and, conditional on the contract setting, an ex-post payment of $p(\gamma)$, and incurs an ex-post state-contingent cost $c(\gamma)$. If he decides to use the intermediary good himself, he experiences a net gain equal to $r$. Finally, we assume that suppliers are risk averse, so that their indirect utility can be represented by a function $V(\cdot)$, with $V'(\cdot) > 0$ and $V''(\cdot) < 0$. [1]

There is no entry into this market. The number of potential suppliers is

[1] $V''(\cdot) < 0$ is justified because, were not the supplier risk-averse, the entrepreneur could just sell her his project and ex-post moral-hazard would be mitigated.

given and sufficiently large so that the outside option of any supplier, when faced with an offer from an entrepreneur, is $V(r)$.[2] Therefore, in principle, suppliers accept any credible offer from entrepreneurs that entail an expected utility equal or above $V(r)$.

***The Structure of Gains from Trade***

There is no uncertainty related to gains from trade. Gains from trade are always positive and constant. Specifically, we assume that

$$v(\gamma) - c(\gamma) = \Delta > r, \forall \gamma \in \Gamma.$$

The assumption states that there are always gains from trade and that these gains are fixed.[3] As such, there is no ex-ante informational asymmetry between entrepreneurs and suppliers. Nevertheless, there is uncertainty regarding the ex-post realizations of cost and value and, therefore, of the distribution of surplus and of potential gains and losses. Depending on the payments $t$ and $p(\gamma)$ predicted in a productive arrangement, certain realizations of $v(\gamma)$ and $c(\gamma)$ may lead either party to want to void the previous agreement. In our model, this possibility is taken into account when agents are designing a contract characterized by $t$ and $p(\gamma)$.

The literature on incomplete contracts has addressed the potential inefficiencies that arise when gains from trade are not certain and when there are asymmetries between players and the least informed party has greater bargaining power (Tirole, 1988). In this paper, we rule out these sources of inefficiency and focus on what happens when the set of contractible events is allowed to vary.

***Timeline and Contracting***

In order to make clear the structure we work with in the remainder of the paper, we bring together all dimensions discussed before and spell out the sequence of events in the model. In the first period, anyone who decides to be an entrepreneur is randomly matched to a supplier. The former, which is assumed to have all the bargaining power ex-ante because of the competition structure between suppliers, makes a take-it-or-leave-it offer of a contract $\{t, p(\gamma)\}_{\gamma \in \Gamma}$. If the supplier accepts the terms, there is ex-ante contracting

[2] To make this statement more precise, assume that in the first stage, when matched to a supplier, an entrepreneur has the option of redrawing another supplier from the distribution of suppliers. In addition, assume that the number of suppliers is larger than the number of potential entrepreneurs.

[3] We need $\Delta \geq r + R\left(G^{-1}(\frac{1}{2})\right) - G^{-1}(\frac{1}{2}) + 2\underline{w}$ in order for the entrepreneur to always be able to remunerate the worker and still be willing to produce.

and the entrepreneur pays $t$ and undertakes investment $e$.

In period 2, $\gamma$ is realized. Following, the entrepreneur hires one unit of labor, receives the value $v(\gamma)$ of the project and the return $R(e)$ to his investment, pays $w$ to the worker and $p(\gamma)$ to the supplier, and then realizes a net gain of $v(\gamma) - t - p(\gamma) - w + R(e) - e$.

Individuals who did not become entrepreneurs simply take the market wage as given in period 2 and choose whether to supply labor in the market or to work in subsistence. Similarly, suppliers that were not matched to entrepreneurs simply make use of their intermediary input earning net income $r$.

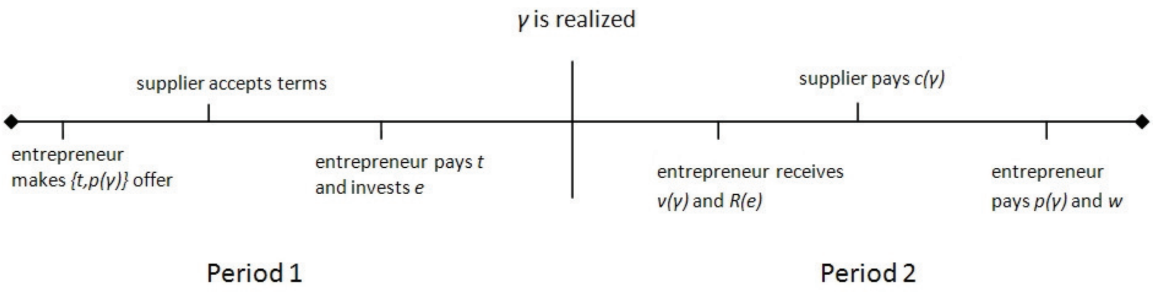


Figure 2.1: Timeline of Events in the Model



Notice that the contracts that are actually written in equilibrium take into account the contractibility of states of nature, the enforceability of contracts, and the ex-post distribution of bargaining power. The latter is particularly important because it determines the final allocation in situations where contracts cannot be written or are voided by courts. Since entrepreneurs' investments are project specific, the ex-post distribution of bargaining power may be different from the ex-ante one. In the second period, suppliers' intermediary good becomes specific to the entrepreneurs' project and vice-versa, so that the surplus cannot be appropriated outside the relationship by either one. It seems reasonable therefore to think that the distribution of ex-post bargaining power in reality varies with the specific production technology in question.[4] For this reason, we explore different alternatives throughout the paper.

[4]What we have in mind are situations where production takes place with the entrepreneur having physical possession of the intermediary input or capital, in comparison to situations where the supplier retains physical control of his capital while production takes place. In extreme cases, one might think that the former corresponds to a situation where ex-post bargaining power is with the entrepreneur, while in the latter it is retained by the supplier.

## 2.2 Complete Contracts

In this subsection and in the following one, we describe the equilibrium under the extreme assumptions of complete contracts and complete absence of contracts. These examples are very useful for they provide benchmarks to our later discussion and highlight a couple of issues that will be of key importance in the remainder of the paper.

Under complete contracts, any contract written in period 1 is upheld in period 2. We assume that $\gamma \sim U(0,1)$. In this case, the expected return to entrepreneurship is given by

$$E\left[y^E\right] = \int_0^1 [v(\gamma) - p(\gamma) - t - w + R(e^*) - e^*]d\gamma,$$

where $e^*$ is the optimal investment in the project conditional on becoming an entrepreneur, to be determined below.

Given that the entrepreneur has all the ex-ante bargaining power, the optimal contract is described by conditions over $\{t, p(\gamma)\}_{\gamma\in\Gamma}$ such that the expected payoff of the agent is maximized and the supplier still wants to participate.

First, assume that there can be no transfers from suppliers to entrepreneurs, such that $t \geq 0$ and $p(\gamma) \geq 0$. Since payment is always guaranteed and interest rate is zero, there is generally no way to separately determine $p$ and $t$ for infra-marginal individuals. For the marginal individual - the one with just enough wealth to invest in order to become an entrepreneur -, though, it follows that $t = 0$. Ex-ante payments play no role in this setting, so complete contracts naturally lead to $t^* = 0$, where the asterisk denotes the optimum contract.

The entrepreneur's problem is to maximize his return, subject to a minimum utility level equal to $V(r)$ for the supplier. Since entrepreneur's utility is decreasing, and supplier's utility increasing, in $p(\gamma)$, the participation constraint is binding in equilibrium:

$$E\left[V(p^*(\gamma) - c(\gamma))\right] = V(r).$$

Moreover, under complete contracts, the risk-neutral entrepreneur is willing to fully insure the risk-averse supplier, such that [5]

$$V(p^*(\gamma) - c(\gamma)) = V(r),\ \forall\, \gamma \in \Gamma.$$

[5] A formal proof is provided in Appendix 6.1.

This expression leads to $p^*(\gamma) = c(\gamma) + r$, $\forall\, \gamma \in \Gamma$.

It is useful to sum-up the structure of payments, so as to compare with other contractual settings:

$$t^* = 0 \text{ and } p^* = c_N + r,$$

where we define $p^* \equiv E\left[p(\gamma)\right]$ and $c_N \equiv E[c(\gamma)]$.

Defining $v_N \equiv E[v(\gamma)]$, it is now straightforward to rewrite the agent's expected return to entrepreneurship:

$$E\left[y^E\right] = v_N - c_N - r - w + R(e^*) - e^* = \Delta - r - w + R(e^*) - e^*,$$

where the second equality follows from the definition of $\Delta$.

The interior solution for the optimum choice of $e$ from the expression above is characterized by $e^* = R'^{-1}(1)$, assuming that the function $R'(\cdot)$ can be inverted. Therefore, an entrepreneur with wealth $a \geq R'^{-1}(1)$ invests $R'^{-1}(1)$ in the project, while an entrepreneur with wealth $a < R'^{-1}(1)$ invests all his wealth. So, for a given individual $i$, optimal investment is given by:

$$e_i^* = \min\{a_i, R'^{-1}(1)\}.$$

Given the expected return to entrepreneurship, the agent chooses the occupation that provides the highest expected gain. As in Ghatak and Jiang (2002), here the distribution of wealth is sufficient to characterize the market equilibrium. Let $G(\cdot)$ be the c.d.f. of initial wealth $a_i$. Then, labor demand – or, equivalently, the fraction of individuals who become entrepreneurs – is given by

$$D(w) = \begin{cases} 0, \text{ if } w > \left(\frac{\Delta - r + R(R'^{-1}(1)) - R'^{-1}(1)}{2}\right), \\ [0, 1 - G(R'^{-1}(1))], \text{ if } w = \left(\frac{\Delta - r + R(R'^{-1}(1)) - R'^{-1}(1)}{2}\right), \\ 1 - G(\hat{a}_i(w)), \text{ if } w \in \left[\left(\frac{\Delta - r}{2}\right), \left(\frac{\Delta - r + R(R'^{-1}(1)) - R'^{-1}(1)}{2}\right)\right), \text{ and} \\ 1, \text{ if } w < \left(\frac{\Delta - r}{2}\right), \end{cases}$$

where $\hat{a}_i(w)$ denotes the level of initial wealth just enough to make an individual indifferent between entrepreneurship and salaried labor. So, $\hat{a}_i(w)$ is defined implicitly from $\Delta - r - w + R(\hat{a}_i(w)) - \hat{a}_i(w) = w$.

Similarly, labor supply – or the fraction of individuals who become workers – is given by

$$S(w)\begin{cases} 0, \text{ if } w < \left(\frac{\Delta - r}{2}\right), \\ G(\hat{a}_i(w)), \text{ if } w \in \left[\left(\frac{\Delta-r}{2}\right), \left(\frac{\Delta-r+R(R'^{-1}(1))-R'^{-1}(1)}{2}\right)\right), \\ [G(R'^{-1}(1)), 1], \text{ if } w = \left(\frac{\Delta-r+R(R'^{-1}(1))-R'^{-1}(1)}{2}\right), \text{ and} \\ 1, \text{ if } w > \left(\frac{\Delta-r+R(R'^{-1}(1))-R'^{-1}(1)}{2}\right). \end{cases}$$

Figure 2 describes the equilibrium for the case where the majority of individuals do not have enough wealth to invest the optimal level in the project $(G(R'^{-1}(1)) > \frac{1}{2})$, which seems to be the most relevant one.

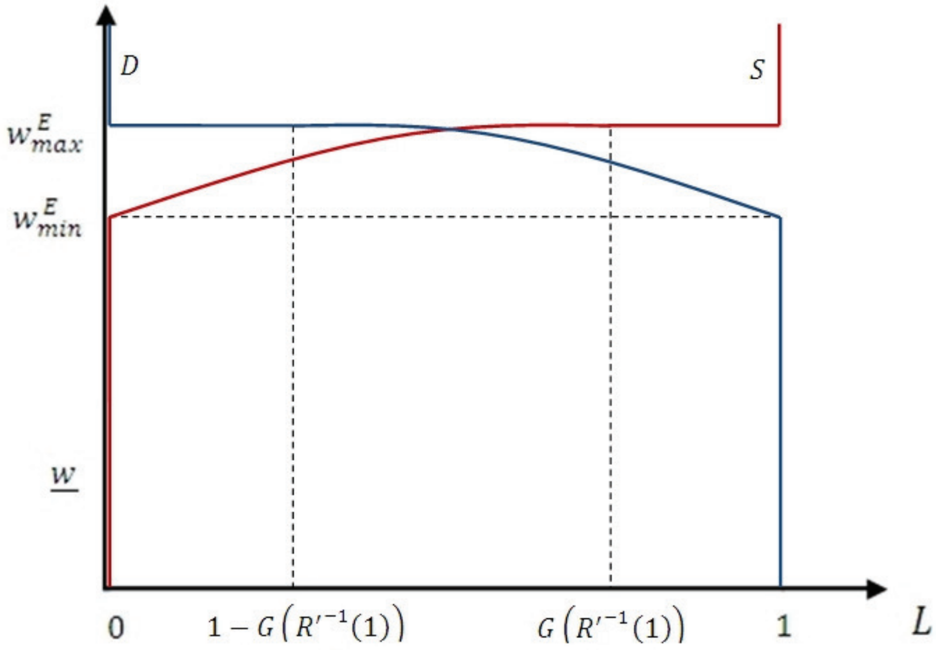


Figure 2.2: Labor Market Equilibrium under Complete Contracts

Notice that this equilibrium features half of the individuals becoming entrepreneurs, irrespective of the initial distribution of wealth.[6] The point is that the wage always makes the necessary adjustment, by making the marginal individual indifferent between being an entrepreneur or a salaried worker. In equilibrium, wage is always given by $w = \left(\frac{\Delta-r+R(G^{-1}(\frac{1}{2}))-G^{-1}(\frac{1}{2})}{2}\right)$, such that entrepreneurs' return is $\left(\frac{\Delta-r}{2} + R(e^*) - e^* - (\frac{R(G^{-1}(\frac{1}{2}))-G^{-1}(\frac{1}{2})}{2})\right)$, with $e^* = min\{a_i; R'^{-1}(1)\}$.

Complete contracts as related to payments between entrepreneurs and suppliers eliminate startup costs and, therefore, there is no inefficiency related to the occupational structure of this economy. But still there is an inefficiency related to investments in the intensive margin ($e$), since some individuals are

[6]The fact that half the individuals are entrepreneurs in equilibrium is simply due to the one-firm-one-employee technology.

credit constrained and are not investing the optimal amount $R'^{-1}(1)$. So we do have liquidity constraint problems in this economy [7], but the existence of complete contracts means that they do not manifest themselves in the occupational structure, but rather on the sub-optimal level of investments by marginal entrepreneurs.

If one goes one step further and eliminates the hypothesis of no transfers from suppliers to entrepreneurs, all inefficiencies are eliminated from this economy as long as suppliers themselves face no credit constraint. This would be akin to thinking of suppliers as playing the role of financial intermediaries. Since contracts are always enforced, suppliers are willing to transfer enough to entrepreneurs ex-ante ($t < 0$) in order to guarantee the optimal investment level $R'^{-1}(1)$, as long as they are compensated ex-post so as to maintain utility equal to $V(r)$. In this case, the optimal contract is characterized by $t^* = a_i - R'^{-1}(1)$, and $p^*(\gamma) = c(\gamma) + r - t^*$. The return to entrepreneurship in this scenario is independent of initial wealth, so all individuals must be indifferent between becoming entrepreneurs and salaried workers. The labor market equilibrium is therefore characterized by $\Delta - r - w + R(R'^{-1}(1)) - R'^{-1}(1) = w$. Half of the individuals become entrepreneurs, every entrepreneur invests the optimal amount, and there are no inefficiencies in the economy.

## 2.3 Missing courts

We now analyze the case when the entire set $\Gamma$ is non-verifiable, so that no biding contracts can be written conditional on $\gamma$. We characterize the equilibrium under two polar assumptions about the ex-post distribution of bargaining power: (i) all ex-post bargaining power belongs to the entrepreneur, and (ii) all ex-post bargaining power belongs to the supplier. [8]

### (a) Entrepreneur with Ex-post Bargaining Power

What motivates a setting in which the entrepreneur holds all ex-post bargaining power is a production process that, for example, requires physical

[7]The point that there can be inefficient investment in occupational choice models due to liquidity constraints was specifically noticed by Jeong and Townsend (2008).

[8]For the general case, define $\alpha \in [0, 1]$ as the proportion of ex-post bargaining power that accrues to the entrepreneur. Then, there is $\alpha^*$ such that for $\alpha > \alpha^*$, $t^* > 0$, and $t^* \leq 0$ (= if suppliers cannot subsidize specific investments) otherwise. Formally,

$$\underline{\theta} V\left(p_m^* - c_N\right) + \int_{\underline{\theta}}^{\overline{\theta}} V\left(p_m^* - c(\gamma)\right) d\gamma + \int_{\overline{\theta}}^{1} V\left(\alpha^*\left(-c(\gamma)\right) + (1-\alpha^*)\left(\Delta - 2\underline{w} + R(e_m)\right)\right) d\gamma = V(r)$$

, where $p_m^*$ and $e_m$ are the average optimal choice of ex-post payments and ex-ante specific investment for the marginal entrepreneur.

capital early on and demands the entrepreneur to hold possession of the capital in order for the project to be undertaken.

The main point in this setting is that entrepreneurs cannot commit to any positive transfer in the last stage of the game (period 2). Since they hold ex-post bargaining power, the only credible ex-post transfer is $p(\gamma) = 0$ for any realization of $\gamma$. Aware of that, if not properly compensated ex-ante the supplier prefers to allocate her capital to the outside project.

Participation therefore can only be induced by a positive ex-ante transfer, in order to compensate for the certain ex-post expropriation the supplier is faced with in any sub-game perfect equilibrium. Accordingly, deprived of the ability to make credible commitments, the entrepreneur sets $t$ just to satisfy the supplier's ex-ante participation constraint:

$$\int_0^1 V\left(t^* - c(\gamma)\right) d\gamma = V(r)$$

Concavity implies $E(t^* - c(\gamma)) > r$, so that $t^* > r + c_N$.

Since the entrepreneur pays to expropriate, he always appropriates the ex-post returns to the project and to investments. So, as before, entrepreneurs who have enough wealth invest optimally, up to the point where $e^* = R'^{-1}(1)$, while entrepreneurs with wealth below $R'^{-1}(1)$ invest everything they have, after having paid the upfront cost $t^*$. So, in this case, the marginal individual who is indifferent between becoming an entrepreneur or a salaried worker is characterized by wealth level $\hat{a}_i(w)$, defined implicitly from $w = v_N - t^* - w + R(\hat{a}_i(w)) - \hat{a}_i(w)$.

We sum-up the structure of payments under this setting as follows:

$$t^* > r + c_N \text{ and } p^* = 0.$$

Equilibrium is different from the complete contracts case, since individuals now face a positive startup cost in order to become entrepreneurs. Labor demand – or the fraction of individuals who become entrepreneurs – is given by:

$$D(w) = \begin{cases} 0, \text{ if } w > \left(\frac{v_N - t^* + R(R'^{-1}(1)) - R'^{-1}(1)}{2}\right), \\ [0, 1 - G(t^* + R'^{-1}(1))], \text{ if } w = \left(\frac{v_N - t^* + R(R'^{-1}(1)) - R'^{-1}(1)}{2}\right), \\ 1 - G(\hat{a}_i(w)), \text{ if } w \in \left[\left(\frac{v_N - t^*}{2}\right), \left(\frac{v_N - t^* + R(R'^{-1}(1)) - R'^{-1}(1)}{2}\right)\right], \text{ and} \\ 1 - G(t^*), \text{ if } w < \left(\frac{v_N - t^*}{2}\right). \end{cases}$$

, where $\hat{a}_i(w)$ is defined implicitly from $v_N - t^* - w + R(\hat{a}_i(w)) - \hat{a}_i(w) = w$.

Equivalently, labor supply – or the fraction of individuals who become workers – is given by:

$$S(w) = \begin{cases} 0, \text{ if } w < \underline{w}, \\ [0, G(t^*)], \text{ if } w = \underline{w}, \\ G(t^*), \text{ if } w \in \left(\underline{w}, \left(\frac{v_N - t^*}{2}\right)\right), \\ G(\hat{a}_i(w)), \text{ if } w \in \left[\left(\frac{v_N - t^*}{2}\right), \left(\frac{v_N - t^* + R(R'^{-1}(1)) - R'^{-1}(1)}{2}\right)\right), \\ [G(t^* + R'^{-1}(1)), 1], \text{ if } w = \left(\frac{v_N - t^* + R(R'^{-1}(1)) - R'^{-1}(1)}{2}\right), \text{ and} \\ 1, \text{ if } w > \left(\frac{v_N - t^* + R(R'^{-1}(1)) - R'^{-1}(1)}{2}\right). \end{cases}$$

Assuming that less than half the individuals have enough wealth to become entrepreneurs, so that $G(t^*) > \frac{1}{2}$, the equilibrium features a measure $1 - G(t^*)$ of entrepreneurs, with expected return given by $v_N - t^* - \underline{w} + R(e^*) - e^*$, where $e^* = \min\{a_i - t^*, R'^{-1}(1)\}$, a measure $1 - G(t^*)$ of individuals as workers, earning a wage $\underline{w}$, and a measure $G(t^*)$ working in subsistence, also with payoff $\underline{w}$. Suppliers incur some uncertainty, but compensated ex-ante in expected value, so that they end up with expected utility equal to $V(r)$. Figure 3 illustrates this labor market equilibrium.

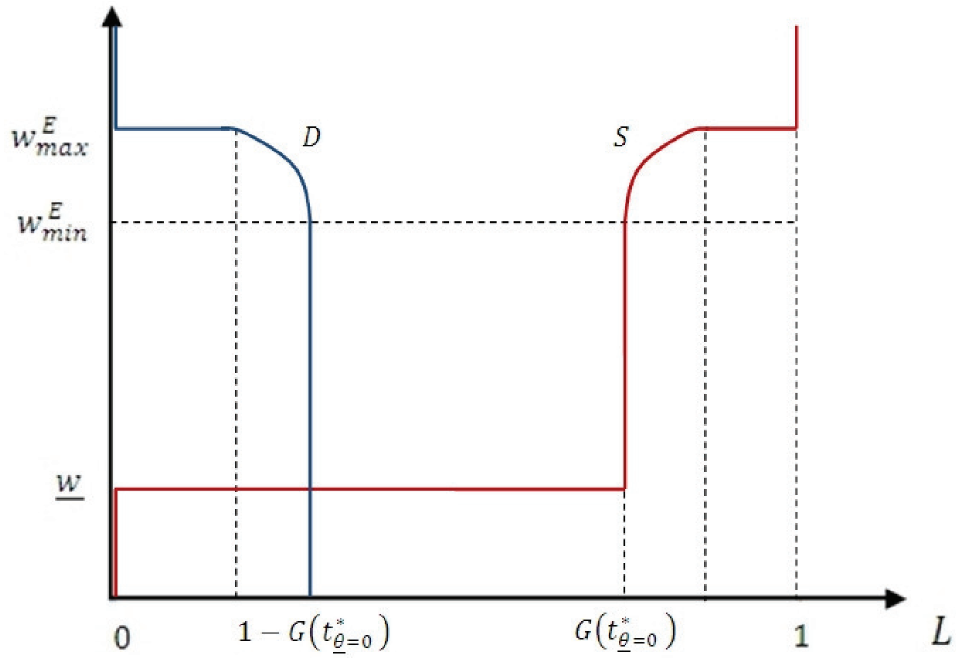


Figure 2.3: Equilibrium under no courts when the entrepreneur holds all the ex-post bargaining power

## (b) Supplier with Ex-post Bargaining Power

Now we turn to the extreme opposite assumption, where suppliers hold all ex-post bargaining power. What motivates this alternative hypothesis is a production process where, for example, the supplier retains physical possession of the capital and of entrepreneur's investment during project implementation.

Under these circumstances, the supplier appropriates all the surplus and enjoys a payoff of $V(\Delta - w - \underline{w})$, leaving to the entrepreneur a gain equal to his ex-post outside option ($\underline{w}$). In trying to induce the entrepreneur to set $e > 0$, the supplier can try to promise a payment above $\underline{w}$ if $e > 0$, but the promise is not credible since ex-post it is always optimal for him to deliver the minimum utility that guarantees entrepreneur participation. So no sub-game perfect equilibrium can exist with $e^* > 0$.[9]

The structure of payments is therefore characterized by:

$$t^* = 0 \text{ and } p^* = v_N - 2\underline{w}. \tag{2.2}$$

Here, $p^*$ corresponds to all surplus net of worker's wage and the entrepreneur's outside option.

In equilibrium, all individuals are indifferent between entrepreneurship and salaried labor. Half of individuals are entrepreneurs, with return given by $\underline{w}$, and half are workers, also receiving $\underline{w}$.[10] The supplier's payoff is given by $V(\Delta - 2\underline{w})$ and $e^* = 0$.

This section highlights the nature of the inefficiencies that may arise in the economy and its relationship with the ability of different agents to appropriate returns. The fundamental underlying conflict is between guarantees of return to entrepreneurs for ex-ante specific investments, and guarantees of payments to suppliers to compensate for the opportunity cost of the intermediary input. Guarantees to suppliers at the expense of guarantees to entrepreneurs reduce incentives for ex-ante investment [11], reducing therefore the productivity of projects. But they do not affect the number of entrepreneurs, since the need for upfront costs is eliminated. On the other hand, guarantees to entrepreneurs at the expense of guarantees to suppliers create the need for ex-ante transfers from entrepreneurs to suppliers, therefore introducing upfront costs that affect the equilibrium number of entrepreneurs. But, in this situation, depending on the distribution of initial wealth, it may be the case that the intensive margin investment of the majority of entrepreneurs is optimal.

[9] It is not possible to induce $e > 0$ through ex-ante payments either, since the entrepreneur would appropriate the transfer and set $e = 0$, anticipating ex-post expropriation.

[10] Since entrepreneurs receive $\underline{w}$ and, in equilibrium, individuals are indifferent between the two occupations, equilibrium can only exist with market wages also equal to $\underline{w}$.

[11] This result reproduces the findings in Hart and Moore (1998).

So the nature of the inefficiencies observed in a given economy depends on the contractibility possibilities available and on the distribution of bargaining power. In addition, inefficiencies related to investments in the intensive margin are likely to arise when ex-ante liquidity constraints are not an issue, and vice-versa. In this sense, the emphasis of the previous literature on liquidity constraints and upfront costs seems to have been exaggerated, and to have overlooked the more diverse nature of the problem and its relationship with the contract environment.

Following, we explicitly model the operation of courts, explore their role in mitigating the inefficiencies discussed in this section, and analyze their impact on entrepreneurship and investment.