This paper considers the theoretical impacts of paid family and medical leave mandates at the state level. Specifically, this paper examines the impact of paid leave on child development, probable labor market responses to paid leave mandates, and the appropriateness of HB 18-1001 as a form of governmental action.

Many proponents of HB 18-1001 argue that such a public policy intervention will serve to promote positive outcomes for children individually, which, in the long run, will benefit society overall. This notion stems from research that increasingly implicates child health as a major determinant of economic success. This is primarily due to the recursive interaction between mental and physical health, readiness to learn, and early educational outcomes (Currie 2018 and referenced studies).

It is commonly understood that poor health in childhood impacts cognitive development by causing direct structural damage to the brain and by impairing infant motor development and exploratory behavior. Long-term effects can arise through structural and functional adaptation, the persistence of early deficits, and by altering the way individuals deal with learning (Victoria, Adair 2008). Consequently, individuals who experience adverse health shocks early in life are likely to be less ready to learn, which directly impacts success in high school and college.

This is problematic considering that children who fail to complete high school are more likely to require a wide range of social services, including welfare, medical assistance, and unemployment assistance. They are also more likely to engage in crime, have poorer health, have lower rates of intergenerational mobility, and lower rates of political participation (Rumberger 2001). These are substantial societal costs that not only motivate but necessitate governmental involvement. However, the notion that family policies, and specifically paid parental leave, will ameliorate these negative externalities by promoting child health and development is based on a body of research that is both underdeveloped and inconclusive.

Standard economic models portray households as productive entities where parents allocate resources to maximize an objective function that includes the health and development of children as one argument (Ruhm 2000). Holding marital status and household size constant, more time, energy,

or income is likely to be devoted to children as more of each resource becomes available to parents. Market employment for new mothers, therefore, may improve child outcomes by preventing a loss in familial income. This enhances child development by allowing the family greater financial resources to purchase child development inputs such as books and educational trips (Blau 1999).

However, under general conditions, market employment is also likely to lead to some decrease in child-related investments of time or energy. Time-diary data demonstrates that working mothers spend less time with children than do their unemployed counterparts (Bryan and Zick 1996; Zick and Bryan 1996; Bianchi 2000; Gershuny 2000; Hofferth 2001; Sandberg and Hofferth 2001), although there is considerable uncertainty about the size of this effect. Considering that maternal time investment is positively correlated with both cognitive and noncognitive outcomes for children from infanthood up through age 7 (Bono, Francesconi, Yvonne 2012), decreased levels of maternal care will be detrimental if non-maternal childcare arrangements are of inferior quality.

Furthermore, marketplace work may decrease the quality of maternal time spent with the infant due to exhaustion, emotional distress, and overload. However, if stay-at-home mothers are more likely to become depressed and withdraw from their children as a consequence of monotony, lack of recognition, or social isolation, then marketplace work may increase the quality of maternal time spent with the infant (Parcel and Menaghan 1994b).

To further complicate matters, psychological and sociological literature emphasize complementary pathways through which market work by parents may negatively affect child development. Belsky (1998) argues that a mother's absence during the first year of life could disrupt mother-child attachments and deprive the child of the stimulation that promotes cognitive development. Coleman (1999) expresses concern that the job-holding will weaken the "social capital" that depends on the relationships in which children are embedded.

However, these effects may vary with household characteristics and age of the child. If well-off parents provide higher quality time, for instance, employment could be more harmful in rich than poor families. Conversely, wealthier families can afford better daycare and educated women spend a greater proportion of their nonmarket time in child-related activities, which may counteract this effect.

The existence of these countervailing effects highlights that the impact of parental leave on child development is not easily determined. Furthermore, child cognitive development is just one argument in the household utility function, which raises the prospect of tradeoffs between this and other desirable outcomes. The benefits of early parental investments might be partially or fully offset by reductions in future incomes, if the time away from work adversely affects advancement in the labor market. The consequences of parental employment are also likely to depend on the technologies and institutional arrangements in place. Therefore, it is no longer self-evident that paid parental leave will improve child outcomes.

Regardless of the ambiguous and potentially harmful effects of HB 18-1001 on child wellbeing, one should still examine the probable labor market behavior of both firms and workers following the implementation of the paid family and medical leave mandates proposed in this bill.

Standard pricing models assert that firms differ in their circumstances, even though they may share the goal of profit maximization. Competition should drive economic profits to zero, but this does not imply similar behavior with respect to all aspects of their operations (Hendel, Lizzeri 2005). A firm with high absence costs may be able to reduce these by paying a higher wage. Such a firm faces a trade-off: offer a high wage in return for good attendance by its workers, or accept that workers are not very reliable and offer a lower wage. The terms of this trade-off are unlikely to be the same for every firm (Hendel, Lizzeri 2005).

Similarly, workers differ in their tastes. Some workers will value highly the freedom that a relatively lax attendance control regime can bring, while others will value this less. Workers are thus confronted with a similar trade-off. Consequently, the market relationship between wages and absence rates is determined by the resolution of these forces in such a way that each worker and firm values the wage-absence mix at the margin identically, and each firm employs workers whose wage demands and absence behavior give it the maximum attainable profit.

This notion of optimal sorting has efficiency implications. In particular, it suggests that an efficient solution to the problem of the assignment of workers with differing degrees of job reliability is available. Firms that require a constant level of marginal productivity will, by definition, also require a low level of absenteeism and pay a relatively high wage to compensate workers for

attending work reliably. Consequently, all other things being equal, workers who have a comparative advantage in attending work reliably, say those who do not have to look after sick family members, take employment in these firms and enjoy the attached wage premium. Conversely, those who appreciate greater flexibility in work attendance take employment in the linear-technology firms and, in equilibrium, earn a lower average wage rate.

Although absenteeism may be costly to firms, observed absenteeism rates are not necessarily inefficient when viewed in the context of the economy as a whole; a worker who misses a day at work to look after himself or an ill family member is expressing a trade-off between workplace production and home production, with home productivity perhaps subject to idiosyncratic shocks. Efficient contracting implies that firms and workers agree to an acceptable absenteeism rate and a compensating wage differential (Anderhub, Gachter 2002). Efficient sorting implies that those workers who can commit themselves to attending work reliably accept employment in assembly-line occupations, and earn a wage premium reflecting the shadow price of absenteeism.

However, while the market will determine the optimal wage rate for employees with heterogeneous rates of absenteeism, the question of the "appropriate amount" of absenteeism remains unaddressed. In the context of a long-term contract of employment, only an unreasonable employer would expect perfect attendance. Therefore, there are certain kinds of shocks to labor supply that employers will regard as justified or acceptable, and others that are not (Kaiser 1998).

Importantly, the morally hazardous behavior of employees utilizing paid sick leave in the absence of contagion will arise only if there are other sources of shocks to household labor supply than acceptable ones. (Treble, Barmby 2011). Consequently, a satisfactory explanation of moral hazard absenteeism is contingent on the existence of at least two kinds of shocks: acceptable shocks, which create the notion of an appropriate equilibrium amount of absenteeism, and other shocks, which enable morally hazardous behavior under the pretense that it is acceptable (Treble, Barmby 2011).

Various researchers have used this idea to create a model of sick pay provision by firms, and demonstrated that firms with linear-technology will provide paid sick leave while firms that require constant marginal production will not (Coles and Treble 1996 and referenced studies). Furthermore,

recent work has extended this equilibrium and demonstrated that, in a broader economic context, the provision of paid leave by firms is more efficient than the provision by private insurance contracts, because firms have an interest in maintaining absence rates at a particular level. An insurance contract between the worker and a third party would not take this interest into account, whereas a contract written between the firm and its workers can internalize the interests of both parties (Milligan 2008 and referenced studies).

This mechanism operates through firms announcing the level of risk they are prepared to accept by bundling up insurance offers with a job contract. Consequently, instead of competing across the spectrum of risks, firms effectively segregate the market, with each appealing only to potential workers with a risk that they regard as acceptable. Under these circumstances, workers who wish to engage in morally hazardous behavior can do so by joining a firm that is able to accept a higher rate of absence than their true exposure to sickness would justify. The moral hazard thus incurs a wage penalty for the worker, who implicitly bears its cost. The firm is content not to enquire whether there is any moral hazard, since it can be confident that its acceptable level of absence will be adhered to.

In conjunction with the ambiguous effects of paid parental leave on child outcomes, the aforementioned argument suggests that the role of the state in the provision of insurance against loss of income due to sickness or familial concerns should be limited. The main reason for supposing that state provision is inefficient is that state agencies do not have the detailed information about the costs and control of absence that firms have. This does not mean that the state should have no role at all. It seems that the reluctance of some firms to provide paid leave was a major motivation behind the lack of insurance coverage currently seen in the United States (Suk 2010), so more encouragement to do so would be a welcome intervention. Nonetheless, that intervention should be limited to the state providing well-structured sick pay provision to its own employees (Barmby, Ercolani 2002), and possibly decreeing that all firms should provide experience-rated sick pay as part of their employment packages.